

**SAMSUNG**

## *Instruction Manual*

# DVD-HR720



**CA** AK68-00758C-01

[www.samsung.ca](http://www.samsung.ca)

**DVD**  
VIDEO  
RAMRW

**DVD**  
VIDEO

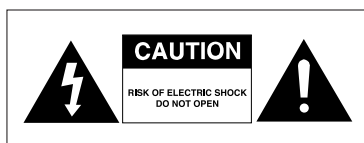
COMPACT  
**disc**  
DIGITAL VIDEO

COMPACT  
**disc**  
DIGITAL AUDIO

# Warning



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

**WARNING :** To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

**CAUTION :** HDD & DVD RECORDERS USE AN INVISIBLE LASER BEAM WHICH CAN CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE RECORDER CORRECTLY AS INSTRUCTED.

## CAUTION

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

## CAUTIONS

**Caution:** To prevent electric shock, match wide blade of plug to wide slot, fully insert.

**Attention:** Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond. This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances, such as radios and televisions, use shielded cables and connectors for connections.



NOTE

- This unit can be used only where the power supply is AC 120V, 60Hz. It cannot be used elsewhere.
- This HDD & DVD recorder is designed and manufactured to respond to the Region Management Information. If the Region number of a HDD & DVD disc does not correspond to the Region number of this HDD & DVD recorder, the HDD & DVD recorder cannot play the disc.
- This device is protected by U.S. Patent Nos.4,631,603;4,577,216;4,819,098;4,907,093; and 6,516,132. This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

DANGER	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL	- SYNLIIG OG USYNLIIG LASERSTRÅLING VED ÅBNING. UNNGÅ UDSÆTTELSE FOR STRÅLING.
VARO !	- AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLÄ. ÄLÄ KATSO SÄTEESEEN.
VARNING	- SYNLIIG OCH OSYNLIIG LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	- SYNLIIG OG USYNLIIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
注意	- 打开时有可见及不可见激光辐射。避免激光束照射。
注意	- ここを開くと可視及び不可視のレーザー光が出ます。ビームを直接見たり、触れたりしないでください。

# Precaution



## Important Safety Instructions

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below. Keep these operating instructions handy for future reference.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

## Handling Cautions

- Before connecting other components to this recorder, be sure to turn them all off.
- Do not move the recorder while a disc is being played, or the disc may be scratched or broken, the recorder's internal parts may be damaged.
- Do not put a flower vase filled with water or any small metal objects on the recorder.
- Be careful not to put your hand into the disc tray.
- Do not place anything other than the disc in the disc tray.
- Exterior interference such as lightning and static electricity can affect normal operation of this recorder. If this occurs, turn the recorder off and on again with the **DVD POWER** button, or disconnect and then reconnect the AC power cord to the AC power outlet. The recorder will operate normally.
- Be sure to remove the disc and turn off the recorder after use.
- Disconnect the AC power cord from the AC outlet when you don't intend to use the recorder for long periods of time.
- Clean the disc by wiping in a straight line from the inside to the outside of the disc.

## Maintenance of Cabinet

For safety reasons, be sure to disconnect the AC power cord from the AC outlet.

- Do not use benzene, thinner, or other solvents for cleaning.
- Wipe the cabinet with a soft cloth.

## HDD (Hard Disk Drive)

The hard disk has a high storage density, which enables long recording durations and quick access to written data. However, it can easily be damaged by shock, vibration or dust and should be kept away from magnets. To avoid losing important data, observe the following precautions.

- Do not use the HDD & DVD RECORDER in a place subject to extreme changes in temperature.
- Do not apply a strong shock to the HDD & DVD RECORDER.
- Do not place the HDD & DVD RECORDER in a location subject to mechanical vibrations or in an unstable location.
- Do not place the HDD & DVD RECORDER on top of a heat source.

- Do not disconnect the AC power cord while the power is on.
- Do not attempt to change the hard disk. This may result in a malfunction.

Should the hard disk be damaged, you cannot recover lost data. The hard disk is only a temporary storage space.

## Disc Handling

- Use discs with regular shapes. If an irregular disc (a disc with a special shape) is used, this HDD & DVD RECORDER may be damaged.



### Holding discs

- Avoid touching the surface of a disc where recording is performed.



### DVD-RAM, DVD-RW and DVD-R

- Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1 where available). Do not use cleaners or cloths for CDs to clean DVD-RAM/-RW/-R discs.



### DVD-Video, Audio-CD

- Wipe off dirt or contamination on the disc with a soft cloth.

### Cautions on handling discs

- Do not write on the printed side with a ball-point pen or pencil.
- Do not use record cleaning sprays or antistatic. Also, do not use volatile chemicals, such as benzene or thinner.
- Do not apply labels or stickers to discs. (Do not use discs fixed with exposed tape adhesive or

leftover peeled-off stickers.)

- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.
- Do not load warped or cracked discs.

## Disc Storage

Be careful not to harm the disc because the data on these discs is highly vulnerable to the environment.

- Do not keep under direct sunlight.
- Keep in a cool ventilated area.
- Store vertically.
- Keep in a clean protection jacket.
- If you move your HDD & DVD RECORDER suddenly from a cold place to a warm place, condensation may generate on the operating parts and lens and cause abnormal disc playback. If this occurs, remove the disc and wait for one to two hours with the power on before attempting playback.
- Be careful not to harm the disc because the data on these discs is highly vulnerable to the environment.

## Disc Specifications

### Disc Type

#### DVD-Video

- A digital versatile disc (DVD) can contain up to 135-minutes of images, 8 audio languages and 32 subtitle languages. It is equipped with MPEG-2 picture compression and Dolby digital surrounding, allowing you to enjoy vivid and clear theater quality images in the comfort of your own home.
- When switching from the first layer to the second layer of a dual-layered DVD Video disc, there may be momentary distortion in the image and sound. This is not a malfunction of the unit.
- Once a DVD-RW/-R recorded in Video Mode is finalized, it becomes DVD-Video.



### Video CD

- Only CD-R disks made in the VCD format (ver 1.1 or 2.0) can be played back.
- The moving pictures for PCs can be played back only provided that they are recorded in VCD format in the CD-Recording program.
- Please contact the CD-R maker for the inquiries related to disks.
- A video CD contains improperly formatted video may cause undesired malfunction on this set.
- A VCD disc copied illegally may not playback properly.

### Audio CD

- An audio disc on which 44.1kHz PCM Audio is recorded.
- Plays CD-DA format audio CD-R and CD-RW discs.
- The unit may not be able to play some CD-R or CD-RW discs due to the condition of the recording.

### CD-RW/-R

- Use a 700MB(80 minutes) CD-R/RW disc. If possible, do not use a 800MB(90 minutes) or above disc, as the disc may not play back.
- If the CD-R/RW disc was not recorded as a closed session, you may experience a delay in the early playback time, all recorded files may not play.
- Some CD-R/RW discs may not be playable with this unit, depending on the device which was used to burn them. For contents recorded on CD-R/RW media from CDs for your personal use, playability may vary depending on contents and discs.

### DVD-R Disc Playback and Recording

- Once a DVD-R recorded in Video Mode is finalized, it becomes DVD-Video.
- You can record onto the available space on the disc and perform editing functions such as giving titles to discs and programs and erasing programs before finalizing.
- When programming is erased from a DVD-R, that space does not become available. Once an area on a DVD-R is recorded on, that area is no longer available for recording, whether the recording is erased or not.
- It takes about 30 seconds for the unit to complete recording management information after recording finishes.

- This product optimizes the DVD-R for each recording. Optimizing is carried out when you start recording after inserting the disc or turning on the unit. Recording onto the disc may become impossible if optimizing is carried out too many times.
- Playback may be impossible in some cases due to the condition of recording.
- This unit can play back DVD-R discs recorded and finalized with a Samsung DVD video recorder. It may not be able to play some DVD-R discs depending on the disc and the condition of the recording.

### DVD-RW Disc Playback and Recording

- Recording and playback can be performed on DVD-RW discs in both the Video and VR Modes.
- Once a DVD-RW recorded in both the Video and VR Modes is finalized, you cannot perform additional recording.
- Once a DVD-RW recorded in Video Mode is finalized, it becomes DVD-Video.
- In both modes, playback can be performed before and after finalization, but additional recording, deleting and editing can not be performed after finalization.
- If you want to record the disc in VR Mode and then record in V Mode, be sure to execute Format. Be careful when executing Format because all the recorded data may be lost.
- A DVD-RW blank disc is initialized to VR Mode when first initialized.

### DVD-RAM Disc Playback and Recording

- Ensure that the recording mode is set to VR mode. Otherwise, this product will not be able to play the recording.
- You cannot play a DVD-RAM in most DVD components due to compatibility issues.
- Only DVD-RAM standard Version 2.0. discs can be played in this unit.
- DVD-RAM recorded on this unit may not work with other DVD components. To determine compatibility with these DVD-RAM discs, refer to the user's manual for the player.
- For cartridge type DVD-RAM discs, remove the cartridge and use the disc only.

## Disc Copy

### Contents Copy Specifications

Contents	HDD → DVD	DVD → HDD
Recorded Video Title	Supported	Supported
Copy Protected Title	Not supported	Not supported
Copy Once Title	Move (Deletes the Title in the HDD after copying)	Not supported
MP3	Not supported	supported
JPEG(photo)	Not supported	supported

Once "Copy Once program" has been recorded on the DVD disc, this title cannot be copied to HDD anymore. But "Copy Once program" has been recorded on the HDD, this title can be copied to DVD-RW(VR mode) or DVD-RAM.

### COPY PROTECTION

- Many DVD discs are encoded with copy protection. Because of this, you should only connect your HDD & DVD RECORDER directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected DVD discs.
- This product incorporates copyright protection technology that is protected by methods claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

### Protection

This HDD & DVD RECORDER can allow you to protect the contents of your discs, as described below.

- Program-protected: See page 92 "Locking(Protecting) a Title"
- Disc-protected: See page 117 "Disc Protection"
- \* DVD-RAM/-RW/-R discs that are incompatible with the DVD-VIDEO format cannot be played with this product.
- \* For more information on DVD recording compatibility, consult your DVD-RAM/-RW/-R manufacturer.
- \* Use of poor quality DVD-RAM/-RW/-R discs may cause following unexpected problems including, without limitation, recording failure, loss of recorded or edited materials or damage to the recorder.

## Disc Format

### Using MP3 disc

- CD-R, DVD-R/RW/RAM, HDD with MP3 files recorded with UDF, ISO9660 or JOLIET format can be played.
- Only MP3 files with the ".mp3" or ".MP3" extension can be played.
- For MP3 files recorded with a VBR(Variable Bit Rates), from 32 Kbps to 320 Kbps, the sound may cut in out.
- Playable bit-rate range is from 56 Kbps to 320 Kbps.
- The unit can handle a maximum of 1,500 files and 1,000 sub folders under a folder

### Using JPEG disc

- CD-R, DVD-R/RW/RAM, HDD with JPEG files recorded with UDF, ISO9660 or JOLIET format can be played.
- Only JPEG files with the ".jpg" or ".JPG" extension can be displayed.
- The unit can handle a maximum of 4,500 files and 1,000 sub folders under a folder.
- MOTION JPEG and progressive JPEG are not supported.

### DVD-RW (VR mode)

- This is a format that is used for recording data on a DVD-RAM or DVD-RW disc. You can record multiple titles, edit, delete, partial delete, create a playlist, etc.
- A disc that is recorded in this mode may not be played by existing HDD & DVD RECORDER.

### DVD-RW (V mode)

- This is a format that is used for recording data on a DVD-RW or DVD-R disc. The disc can be played by existing HDD & DVD RECORDER once it has been finalized.
- If a disc that has been recorded in Video Mode by a different maker's recorder but has not been finalized, it cannot be played or additionally be recorded by this recorder.

## Do not use the following discs!

- LD, CD-G, CD-I, CD-ROM, DVD-ROM, DVD+R and DVD+RW discs should not be used in this product. [Note]

Disc types that can be played : CD/CD-R/CD-RW/VCD/MP3/JPEG/DVD-Video/DVD-RAM/-RW/-R.

For a DVD-RW/-R disc, which has been recorded in Video Mode on another component, it can play only when finalized.

- Some commercial discs and DVD discs purchased outside your region may not be playable with this product. When these discs are played, either “No disc.” or “Please check the regional code.” will be displayed.
- If your DVD-RW disc is an illegal copy or is not in DVD video format, it may also not be playable.

\* We recommend using one of the discs in the table as they have been confirmed to be compatible with this unit. Other discs may not perform correctly.

Media	Brand	Speed
DVD-R	TDK	4x
	Beall	4x
	Sony	4x
	That's	4x
	Mitsubishi	4x
	Maxell	4x
DVD-RW	Panasonic	4x
	TDK	2x
	Maxell	2x
	Optodisc	2x
	JVC	2x
	Mitsubishi	2x
	Radius	2x
DVD-RAM	Verbatim	2x
	Maxell	3x
	Maxell	2x
	Fujifilm	3x
	Panasonic	2x
	TDK	2x
	Panasonic Gold	3x
	Panasonic	3x

Disc	Maximum no. of recordings by disc type
DVD-RAM	100,000
DVD-RW	1,000
DVD-R	1

- We take no responsibility and offer no compensation for any recording failure, loss of recorded or edited material and/or damage to the recorder arising from usage of unrecommended discs.

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# General Features



The HDD & DVD RECORDER allows you to record and play high quality digital video on DVD-RAM/-RW/-R or HDD discs. You can also edit digital images on DVD-RAM/-RW/-R discs or HDD.

## HDD Recording

You can record up to 208 hours of video (in Extend EP mode) on the internal 120GB (gigabyte) hard disk (HDD). With both recordable DVD and a high-capacity HDD in the same recorder, you have the flexibility to keep recordings on the HDD for quick access anytime, or record to DVD for archiving or playing on other DVD players.

## Copy between HDD and DVD

You can copy recordings from the HDD to recordable DVD, or from DVD to the HDD. Usually you can use the high speed copy feature.

You can also choose to copy material at different recording quality from the original. For example, you might want to copy a XP mode (highest quality) recording on the HDD to SP (standard play) quality on a DVD so that you can fit other recordings on the same disc.

## Simultaneous Recording and Playback

Playback and recording for both DVDs and the built-in hard disk drive (HDD) are completely independent. For example you can record a broadcast program to either a recordable DVD or the HDD, while watching another recording you already made on the same DVD or on the HDD.

## High quality digital audio and video recording and playback

Record up to 16-hours of video with a double sided 9.4 GB DVD-RAM disc, up to 8-hours of images with a 4.7 GB DVD-RAM/-RW/-R disc, depending on the recording mode.

## Selectable Recording Mode

You can set your recorder to one of four different recording speeds, each varying in recording quality and length. EP (6Hr or 8Hr) mode yields the most recording time, LP & SP modes provide less recording time with higher quality recording, XP mode gives you the highest quality recording.

## Automated Quality Adjustment for Timer Recording

If FR mode is selected, the video quality is adjusted automatically so that all video for the scheduled time can be recorded onto the free disc space.

(See page 84)

## Creating a DVD video title using DVD-RW/-R disc

With the HDD & DVD RECORDER, you can create your own DVD Video titles on 4.7 GB DVD-RW/-R discs.

## Copying data from a digital camcorder using a DV input jack

Record DV Device video onto HDD, DVD-RAM, DVD-RW or DVD-R discs using the DV input jack (IEEE 1394-4pin/4pin). (See page 79)

## High quality progressive scan

Progressive scanning provides high resolution and flicker free video. The 10-bit 54-MHz DAC and 2D Y/C Separating Circuitry provides the highest image playback and recording quality. (See pages 40~42)














## A variety of functions with an easy-to-use user interface

The integrated menu system and the messaging function allow you to perform desired operations both easily and conveniently. With a HDD, DVD-RAM or DVD-RW disc, you can edit recorded video, create a playlist, edit video in a specific sequence according to your requirements.

# Before Reading the User's Manual

Make sure to check the following terms before reading the user manual.

## Icons that will be used in manual

Icon	Term	Definition
	HDD	This involves a function available in HDD.
	VCD	This involves a function available in VCD or CD-R/CD-RW discs.
	DVD	This involves a function available in DVD or DVD-R/DVD-RW discs that have been recorded and finalized in Video Mode.
	RAM	This involves a function available in DVD-RAM.
	RW	This involves a function available in DVD-RW.
	R	This involves a function available in DVD-R.
	CD	This involves a function available in a data CD (CD-R or CD-RW).
	JPEG	This involves a function available in a data picture CD (CD-R or CD-RW).
	MP3	This involves a function available in a data CD (CD-R or CD-RW on which MP3 is recorded).
	Caution	This involves a case where a function does not operate or settings may be cancelled.
	NOTE	This involves tips or instructions on the page that help each function operate.
	One-Touch button	A function that can be operate by using only one button.
	ANYKEY button	A function that can be operated by using <b>ANYKEY</b> button.

## About the use of this user's manual

- 1) Be sure to be familiar with Safety Instructions before using this product. (See pages 2~7)
- 2) If a problem occurs, check the Troubleshooting. (See pages 123~126)

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# How to use the HDD & DVD RECORDER

## Step 1 Select the disc type or HDD

This unit can record on the following types of discs. If you want to repeatedly record on the same disc or you want to edit the disc after recording, select a rewritable DVD-RW or DVD-RAM type disc. If you want to save a recording without any changes, choose a non-rewritable DVD-R. You can record files directly to the built-in HDD or edit a recorded file.

**HDD**   

## Step 2 Format the disc to start recording

Unlike a VCR, the recorder automatically starts formatting when an unused disc is inserted. This is required for the preparation of recording on a disc.

### Using a HDD

Formatting unnecessary.

### Using a DVD-RAM

This type of disc can be formatted in DVD-Video Recording format (VR mode). You can edit recorded image and create a playlist and edit images in a specific sequence according to your requirements.

### Using a DVD-RW

This type of disc can be formatted in either DVD-Video format (V mode) or DVD-Video Recording format (VR mode). For an unused disc, a message that asks whether to format in VR Mode or not is displayed. You can play a Video mode disc on various DVD components. A VR mode disc allows more varied editing.

### Using a DVD-R

This type of disc can be formatted in DVD Video format. After formatting is complete, you can record on the disc. You can play this type of discs on various DVD components only when they have been finalized.





NOTE

- You can only use either the VR or Video mode on a DVD-RW, but not both at the same time.
- You can change the DVD-RW format to another format by reinitializing. It should be noted that the disc's data will be lost when changing formats.

### Step 3 Recording

There are two different recording methods, Direct Recording and Timer Recording. Timer recording is classified.

Recording mode : XP (high quality mode), SP (standard quality mode), LP (long recording mode), and EP (extended mode) according to the recording mode. When recording is set in the FR mode, the best quality picture is recorded with regards to the remaining time on the disc.

### Step 4 Playing

You can select the title you want to play in a displayed menu and then immediately start playback.

A DVD consists of sections, called titles, and sub sections, called chapters.

During recording, a title is created between two points where you start and stop recording. Chapters will be created automatically when you finalize recording on DVD-RW/-R discs in Video mode.

The chapter's length (interval between chapters) varies according to the recording mode.

### Step 5 Editing a recorded disc

Editing on discs is easier than conventional video tapes. The recorder supports many different edit functions, possible only with DVDs and HDD.

With a simple and easy edit menu, you can operate various edit functions, such as delete, copy, rename, lock, etc., on a recorded title.

#### **Creating a playlist (DVD-RAM/-RW in VR mode, HDD)**

With this recorder, you can create a new playlist on the same disc and edit it without the change of the original recording.

### Step 6 Finalizing & Playing on other DVD components

To play your DVD on other DVD components, finalizing may be necessary. First, finish all editing and recording operations, then finalize the disc.

#### **When using a DVD-RW disc in VR Mode**

Although finalizing is generally unnecessary when playing the disc on a VR Mode compatible component, a finalized disc should be used for playback on that type of component.

#### **When using a DVD-RW disc in Video Mode**

The disc should be finalized first to enable playback on anything other than this recorder. No more editing or recording can be made on the disc once it has been finalized.

To enable recording on the disc again, disc should be unfinalized.

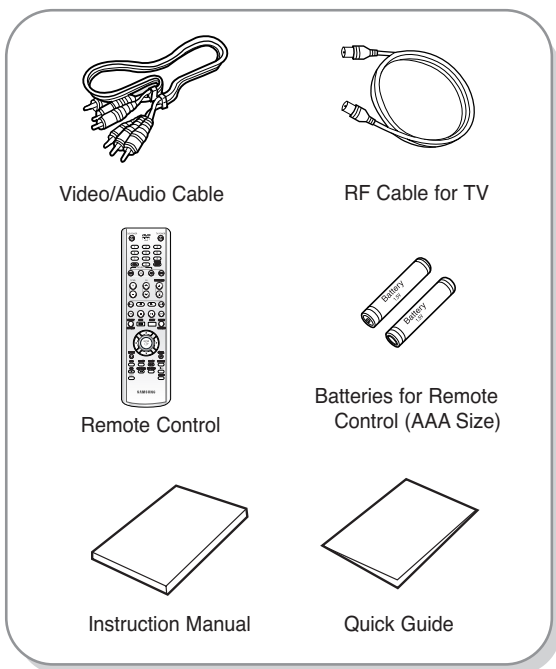
#### **When using a DVD-R disc**

You should finalize the disc to play it on a component other than this recorder. You cannot edit or record on the disc once it has been finalized.

# Unpacking

## Accessories

Check for the supplied accessories below.



## Preparing the Remote Control

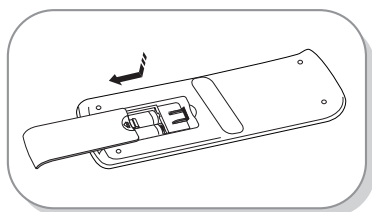
### Install Batteries in the Remote Control

- Open the battery cover on the back of the remote control.
- Insert two AAA batteries. Make sure that the polarities (+ and -) are aligned correctly.
- Replace the battery cover.

### If the remote does not operate properly:

- Check the polarity + - of the batteries (Dry-Cell)
- Check if the batteries are drained.
- Check if remote sensor is blocked by obstacles.
- Check if there is any fluorescent lighting nearby.

Dispose of batteries according to local environmental regulations. Do not put them in the household trash.



## Setting the Remote Control

You can control certain functions of another manufacturer's TV with this remote control. Control function buttons involve: **TV POWER**, **CH**  $\wedge$   $\vee$ , **TV VOL** + -, number buttons, **TV MUTE**, **INPUT** button.



### Controlling TVs with the Remote Control

1. Press and hold the **TV POWER** button.
2. Enter a 2-digit code by using the numerical buttons on the remote control.

#### See “Controllable TV Codes”

If the code works, your TV set will be turned on or off. If it does not respond, try other codes.

Controllable TV Codes.

BRAND	BUTTON
AIWA	82
ANAM	10, 11, 12, 13, 14, 15, 16, 17, 18
BANG & OLUFSEN	57
BLAUPUNKT	71
BRANDT	73
BRIONVEGA	57
CGE	52
CONTINENTAL EDISON	75
DAEWOO	19, 20, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34
EMERSON	64
FERGUSON	73
FINLUX	06, 49, 57
FORMENTI	57
FUJITSU	84
GRADIENTE	70
GRUNDIG	49, 52, 71
HITACHI	60, 72, 73, 75
IMPERIAL	52
JVC	61, 79
LG	06, 19, 20, 21, 22, 78
LOEWE	06, 69
LOEWE OPTA	06, 57
MAGNAVOX	40
METZ	57
MITSUBISHI	06, 48, 62, 65
MIVAR	52, 77
NEC	83
NEWSAN	68
NOBLEX	66
NOKIA	74
NORDMENDE	72, 73, 75
PANASONIC	53, 54, 74, 75
PHILIPS	06, 55, 56, 57
PHONOLA	06, 56, 57
PIONEER	58, 59, 73, 74
RADIOLA	06, 56
RADIOMARELLI	57
RCA	45, 46
REX	74
SABA	57, 72, 73, 74, 75
SALORA	74
SAMSUNG	01, 02, 03, 04, 05, 06, 07, 08, 09
SANYO	41, 42, 43, 44, 48
SCHNEIDER	06

BRAND	BUTTON
SELECO	74
SHARP	36, 37, 38, 39, 48
SIEMENS	71
SINGER	57
SINUDYNE	57
SONY	35, 48
TELEAVA	73
TELEFUNKEN	67, 73, 75, 76
THOMSON	72, 73, 75
THOMSON ASIA	80, 81
TOSHIBA	47, 48, 49, 50, 51, 52
WEGA	57
YOKO	06
ZENITH	63



#### NOTE

- If several codes are indicated for your television brand, try each one in turn until you find one that works.
- If you replace the remote control's batteries, you must set the brand code again.

**Then you can control the television using the following buttons after the TV button.**

Button	Function
TV POWER	Used to switch the television on and off.
INPUT	Used to select an external source.
TV VOL (+ -)	Used to adjust the volume of the television.
CH ( ^ v )	Used to select the desired channel.
TV MUTE	Used to toggle the sound on and off.
0~9	Used to input number directly.

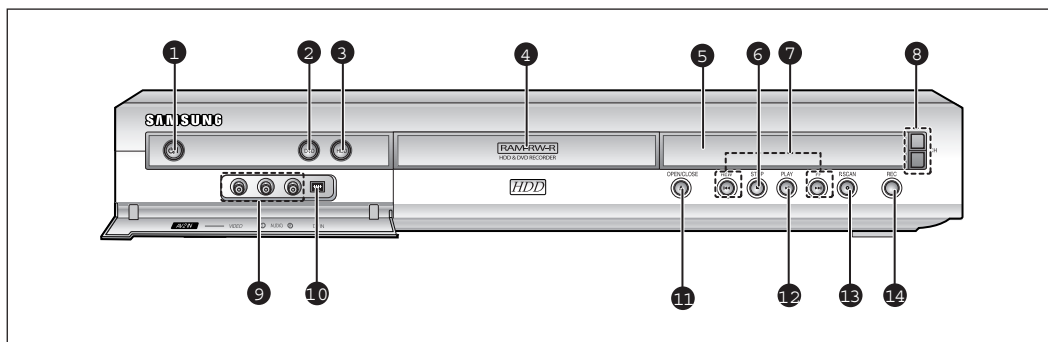


#### NOTE

- The various functions will not necessarily work on all televisions. If you encounter problems, operate the television directly.

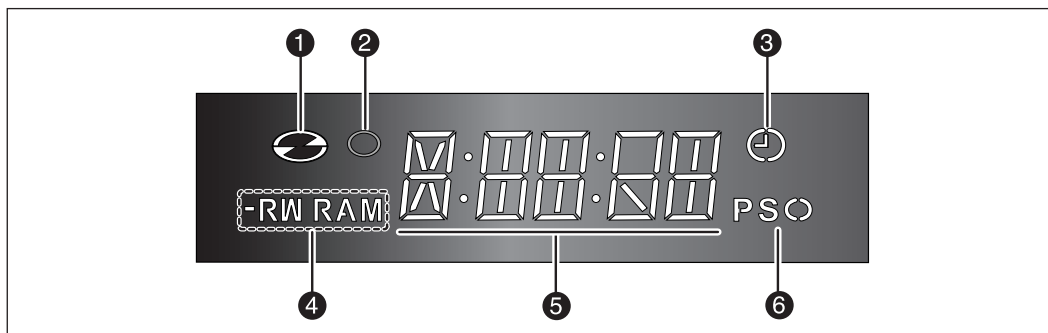
# Description

## Front Panel



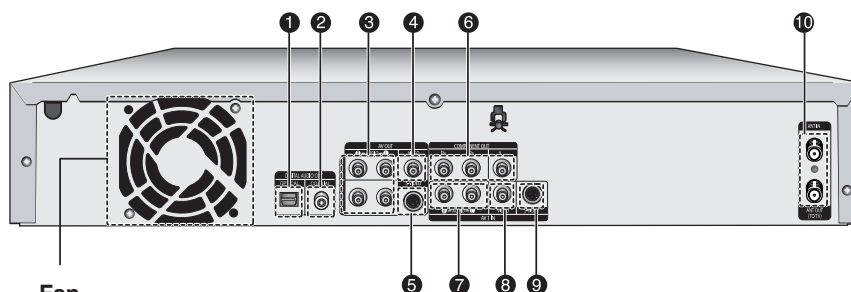
- 1. POWER BUTTON**  
Turns the recorder on and off.
- 2. DVD BUTTON**  
Select DVD mode.
- 3. HDD BUTTON**  
Select HDD mode.
- 4. DISC TRAY**  
Opens to accept a disc.
- 5. DISPLAY**  
Displays the playing status, title/ chapter/ time, etc.
- 6. STOP BUTTON**  
Stops disc playback.
- 7. SEARCH/SKIP BUTTONS**  
Goes to the next title/chapter/track or goes back to the previous title/chapter/track.
- 8. CH BUTTONS**  
Select TV preset Channels. Same as **CH** button on the remote control.
- 9. AV 2 INPUT**  
Connect external equipment.
- 10. DV-INPUT**  
Connect external digital equipment with a DV jack. (such as a camcorder)
- 11. OPEN/CLOSE BUTTON**  
Opens and closes the disc tray.
- 12. PLAY/PAUSE BUTTON**  
Plays a disc or pauses playback or recording.
- 13. P.SCAN BUTTON**  
Selects the progressive scan mode.
- 14. REC BUTTON**  
Starts recording.

## Front Panel Display



1. Lights when a disc is loaded.
2. Lights in the record mode.
3. Lights to indicate the timer record mode.
4. Lights when a -R/RW/RAM disc is loaded.
5. Playing time/clock/current status indicator.
6. Lights in the progressive scan mode.

## Rear Panel



### Fan

The fan always revolves when the power is on.  
Ensure a minimum of 4" clear space on all sides of the fan when installing the product.

#### 1. DIGITAL AUDIO OUT(OPTICAL)

Connects to an amplifier having a digital optical audio input jack.

#### 2. DIGITAL AUDIO OUT(COAXIAL)

Connects to an amplifier having a digital coaxial audio input jack.

#### 3. AV AUDIO OUT

Connects to the audio input of external equipment using audio cables.

#### 4. AV VIDEO OUT(good video quality)

Connects the input of external equipment using a Video cable.

#### 5. AV S-VIDEO OUT(better video quality)

Connects the input of external equipment using an S-Video cable.

#### 6. COMPONENT VIDEO OUT(best video quality)

Connects to equipment having Component video input jacks.

#### 7. AV 1 AUDIO IN

Connects the output of external equipment using an audio cables

#### 8. AV 1 VIDEO IN

Connects the output of external equipment using a video cable.

#### 9. AV 1 S- VIDEO IN

Connects the output of external equipment using an S-Video cable.

#### 10. ANT IN/ANT OUT (TO TV)

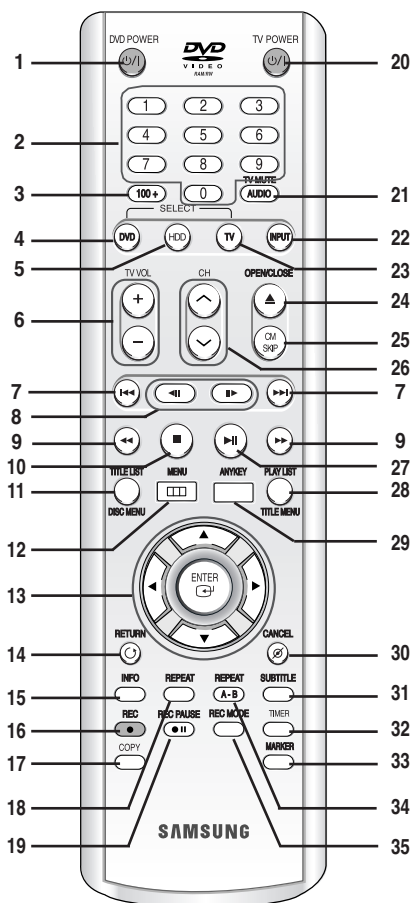
Connects antenna cables.



NOTE

- The Antenna connection does not pass output signal of DVD. To watch a DVD on your TV, you must connect audio/video cables.

## Tour of the Remote Control



1. **DVD POWER Button**
2. **NUMBER Buttons**
3. **100+ Button**  
Press this to select channel 100 or higher.
4. **DVD Button**  
Press this to operate DVD.
5. **HDD Button**  
Press this to operate HDD.
6. **TV VOL Button**  
TV volume adjustment
7. **REVERSE/FORWARD SKIP Buttons**  
Press to skip a disc backwards or forwards.
8. **REVERSE/FORWARD STEP Buttons**  
Each press will play one-frame forward or reverse.
9. **REVERSE/FORWARD SEARCH Buttons**  
Press to search a disc backwards or forwards.
10. **STOP Button**  
Press to stop a disc.
11. **TITLE LIST/DISC MENU Button**  
Use this to enter the View Recording list/disc menu.
12. **MENU Button**  
Brings up the HDD & DVD RECORDER's setup menu.

13. **ENTER/DIRECTION Buttons (▲▼◀▶ Buttons)**
14. **RETURN Button**
15. **INFO Button**  
This will display current setting or disc status.
16. **REC Button**  
Use to make a recording on HDD/DVD-RAM/-RW/-R discs.
17. **COPY Button**  
Press this when you copy DVD to HDD or HDD to DVD. To start copying, press the **COPY** button on the title list screen or press the **COPY** button during the playback.
18. **REPEAT Button**  
Allows you to repeat a title, chapter, track or disc.
19. **REC PAUSE Button**  
Use this to pause during recording.
20. **TV POWER Button**
21. **AUDIO/TV MUTE Button**  
Use this to access various audio functions on a disc (DVD mode).  
This operates as sound mute. (TV mode)
22. **INPUT Button**  
Select line input signal in external input mode. (Tuner, AV1, AV2 or DV Input)
23. **TV Button**  
Press this to operate TV.
24. **OPEN/CLOSE Button**  
To open and close the disc tray.
25. **CM SKIP Button**  
When a program recorded on DVD disc or HDD is played, the unit can be set to automatically skip a portion of the program.
26. **CH Button**  
Use this to select a TV channel.
27. **PLAY/PAUSE Button**  
Press to play/pause a disc.
28. **PLAY LIST/TITLE MENU Button**  
Use this to return to the Title menu, or to view the recorded files list.
29. **ANYKEY Button**  
View and select the applicable features under current status.
30. **CANCEL Button**
31. **SUBTITLE Button**  
Press this to switch the DVD's subtitle language.
32. **TIMER Button**  
Press to directly enter the Timer Recording Mode menu.
33. **MARKER Button**  
Use this to bookmark a position while playing a disc.
34. **REPEAT A-B Button**  
Allows you to repeat a title, chapter, track or disc.
35. **REC MODE Button**  
Use this to set the desired Recoring time and picture quality. (XP/SP/LP/EP)

# Connecting & Setting up

This section involves various methods of connecting the HDD & DVD RECORDER to other external components and required initial setting modes.

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Step 3 : Connecting the Audio cable .....	23
Step 4 : Connecting External devices .....	24
Step 5 : Connecting the Power Cord .....	25

## Quick Overview

A Quick Overview presented in this guide will give you enough information to start using the recorder.

### Step 1 : Connecting the Antenna cable



### Step 2 : Connecting the Video cable



### Step 3 : Connecting the Audio cable



### Step 4 : Connecting External devices



### Step 5 : Connecting the Power cord

- **Note to CATV system installer:** This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.



## Step 1: Connecting the Antenna Cable

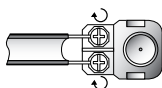
There are several ways to connect your HDD & DVD RECORDER. Select one of the following antenna connections that best suits you below.

- Method 1 : Antenna + HDD & DVD RECORDER + TV : No Cable box
- Method 2 : Antenna + Cable box + HDD & DVD RECORDER + TV : Cable box with many scrambled channels
- Method 3 : Antenna + HDD & DVD RECORDER + Cable box + TV : Cable box with a few scrambled channels

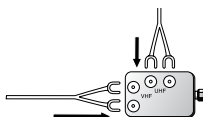


NOTE

- If you are using an off-air antenna that has 300-ohm twin flat leads, use an external antenna connector (300-75 ohm adaptor : not supplied) to connect the antenna to the HDD & DVD RECORDER.



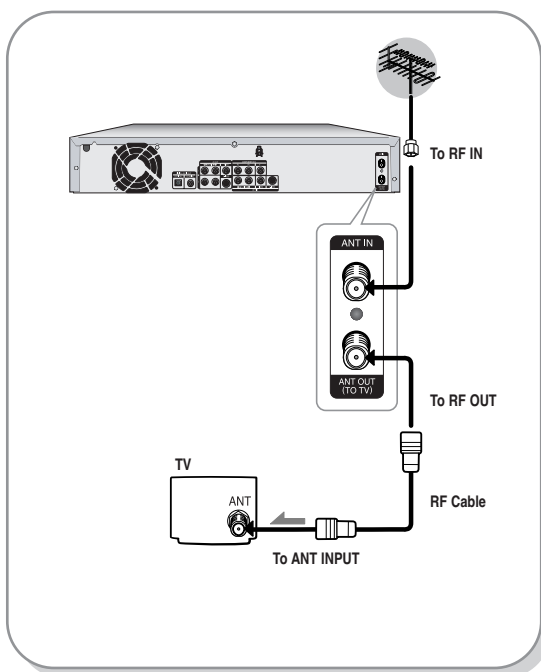
- If you have two separate antennas (one VHF and the other UHF), use a UHF/VHF combiner-adaptor (available at most electronics shops) to connect the antenna to the HDD & DVD RECORDER.



- The VHF/UHF RF OUT jack of this product sends only signals received through the antenna. It does not output Audio/ video signals. You must connect audio/video cables to view Video from the unit. (i.e. DVD playback)

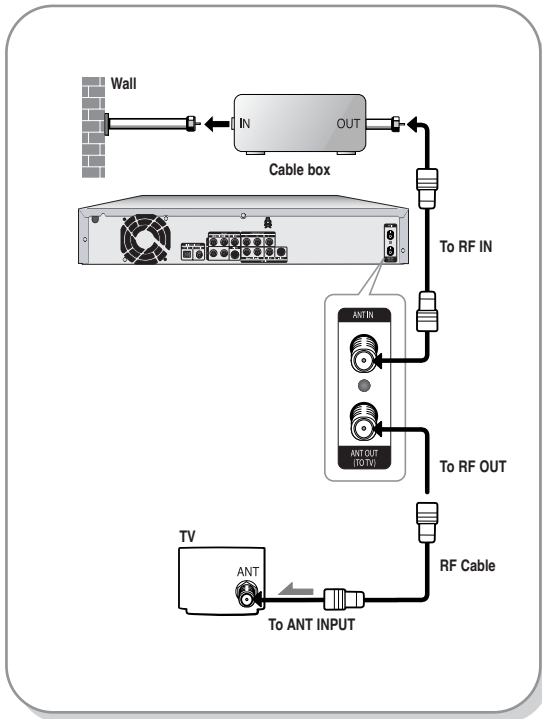
## Method 1 : Antenna + HDD & DVD RECORDER + TV : No Cable box

You can record non-scrambled channels by selecting the channel on the HDD & DVD RECORDER. Also use this Method if you watch channels without cable box.



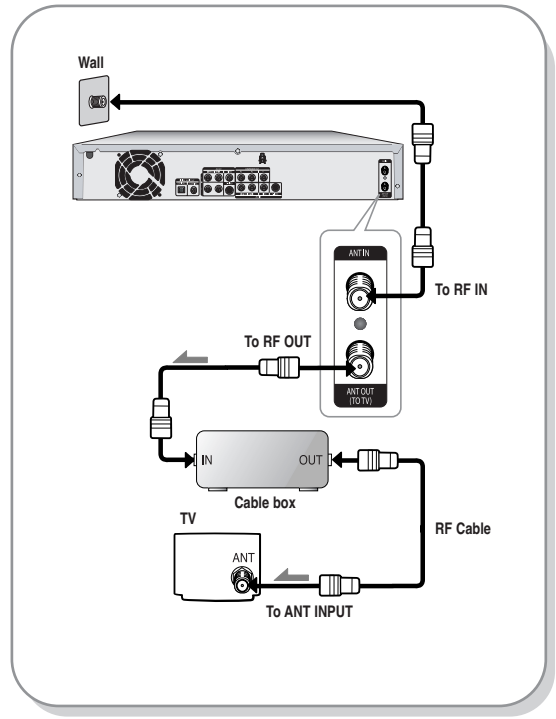
## Method 2 : Antenna + Cable box + HDD & DVD RECORDER + TV : Cable box with many scrambled channels

You can record channels by selecting the channel on the cable box. You cannot record one channel while watching another channel. Be sure that the cable box is turned on.



## Method 3 : Antenna + HDD & DVD RECORDER + Cable box + TV : Cable box with a few scrambled channels

You can record non-scrambled channels by selecting the channel on the cable box. You cannot record scrambled channels that require a cable box.



## Step 2 : Connecting the Video cable

There are several ways to connect your HDD & DVD RECORDER. Select one of the following video connecting that best suits you below.

- Method 1 : Connecting to a Video input jack
- Method 2 : Connecting to an S-video input jack
- Method 3 : Connecting to Component video input jacks

S-Video, Component video and Progressive Output Modes

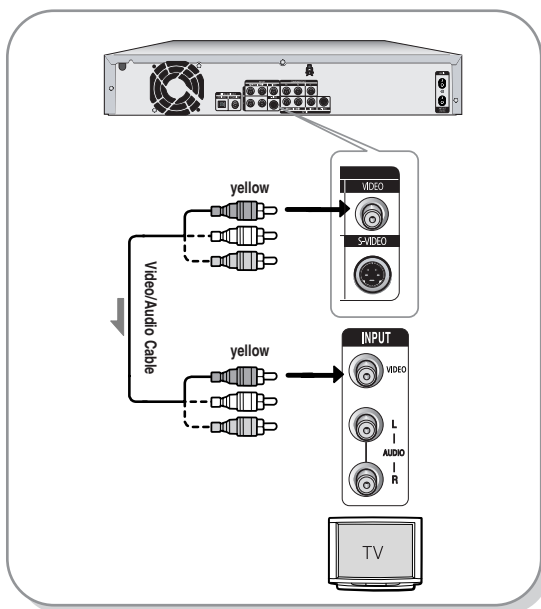
- S-Video and Component video output are available only if your TV supports S-Video input or Component video input, respectively. If S-Video or Component video output does not work, check the TV connections and the TV input selection settings. (For information on how to connect to a TV, see page 19.)
- Compared to standard interlaced video, progressive scan doubles the amount of video lines fed to your TV, resulting in a more stable, flicker-free, and clear image than interlaced video. The progressive scan video output jack is used in progressive output mode. This is only available with TVs that support progressive scan.
- Progressive Scan Output (480p)  
 "Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. If you experience 480p progressive scan picture problems, it is recommended that the user switch the connection to the 'standard definition' output. If there are questions regarding our TV set compatibility with this model, please contact our customer service center at 1-800-SAMSUNG.
- The VHF/UHF RF OUT jack of this product sends only signals received through the antenna. It does not output audio/video signals.

You must use one of the following audio/video connections on this unit.

## Method 1 : Connecting to a Video input jack

Connect a video(yellow) cable between the VIDEO(yellow) OUT jack on HDD & DVD RECORDER and VIDEO(yellow) IN jack on the TV (or AV amplifier).

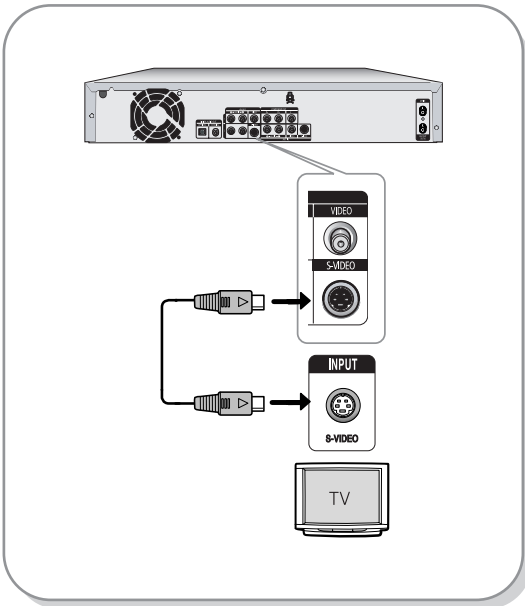
- You will enjoy regular quality images.
- Connect audio cables(white and red) between the AUDIO OUT jacks on the HDD & DVD RECORDER and AUDIO IN jacks on TV(or AV amplifier). (See pages 23~24)



## Method 2 : Connecting to an S-Video input jack

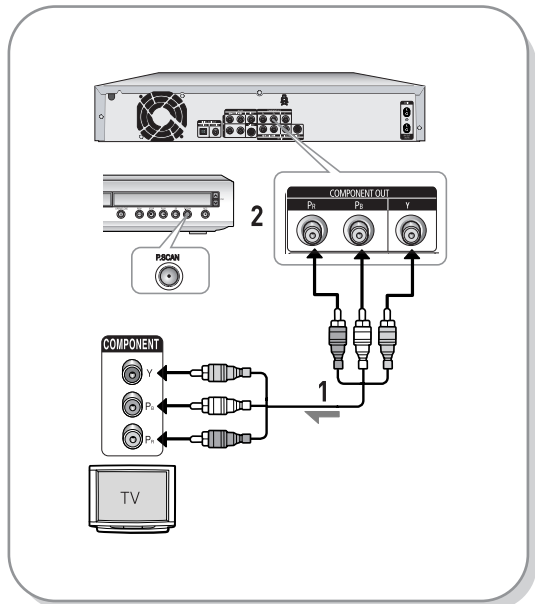
Connect an S-Video cable(not supplied) between the S-VIDEO OUT jack on HDD & DVD RECORDER and S-VIDEO IN jack on your TV (or AV amplifier).

- You will enjoy high quality images. S-Video separates the picture element into black and white (Y) and color (C) signals to present clearer images than regular video input mode.
- Connect audio cables(white and red) between the AUDIO OUT jacks on the HDD & DVD RECORDER and AUDIO IN jacks on TV(or AV amplifier). (See pages 23~24)



## Method 3 : Connecting to Component video input jacks(Y,P<sub>B</sub>,P<sub>R</sub>)

1. Connect Component video cables(not supplied) between the COMPONENT OUT(Y,P<sub>B</sub>,P<sub>R</sub>) jacks on HDD & DVD RECORDER and COMPONENT IN(Y,P<sub>B</sub>,P<sub>R</sub>) jacks on your TV.
2. Connect audio cables (white and red) between the AUDIO OUT jacks on the HDD & DVD RECORDER and AUDIO IN jacks on TV (or AV amplifier). (See pages 23~24).
3. After connecting, refer to the page 40 to 42.
  - You will enjoy high quality and accurate color reproduction images.



NOTE

- Make sure that the color coded connections match. The Y, P<sub>B</sub>, P<sub>R</sub> component output jacks of your HDD & DVD RECORDER must be connected to the exact corresponding component input jacks on your TV.

## Step 3 : Connecting the Audio cable

There are several ways to connect your HDD & DVD RECORDER. Select the audio connection that best suits you below.

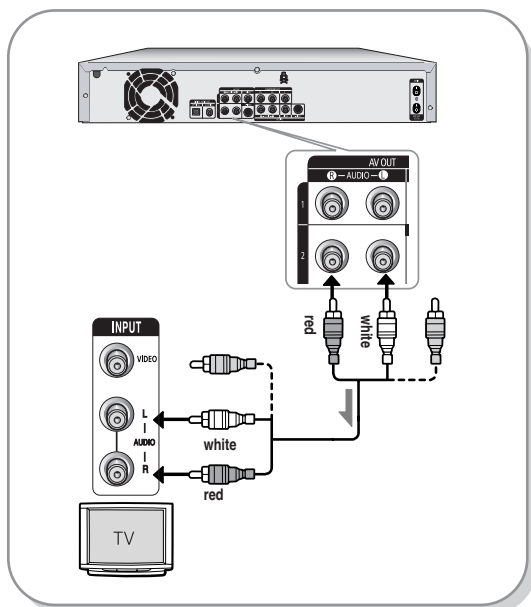
- Method 1 : Connecting to your TV
- Method 2 : Connecting to a stereo amplifier (analog audio out)
- Method 3 : Connecting to an AV amplifier with a digital input jack

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

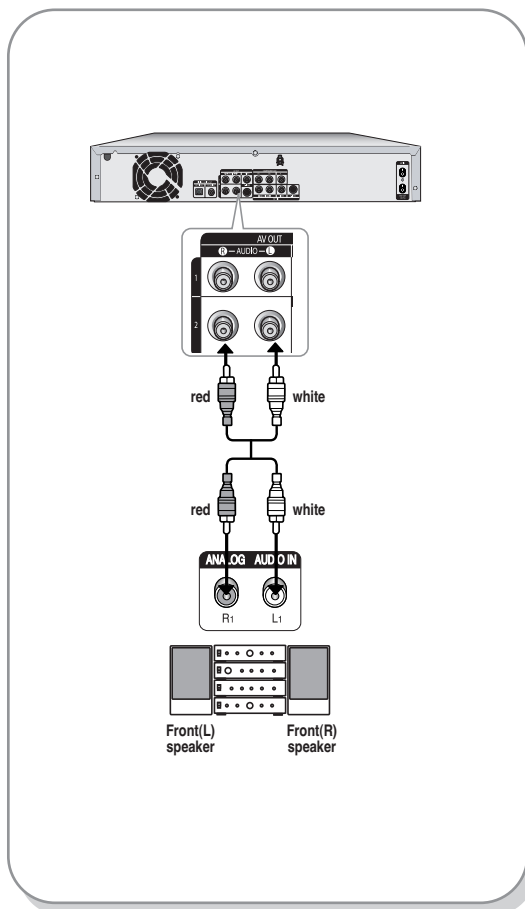
### Method 1 : Connecting to your TV

This connection will use your TV's speakers.



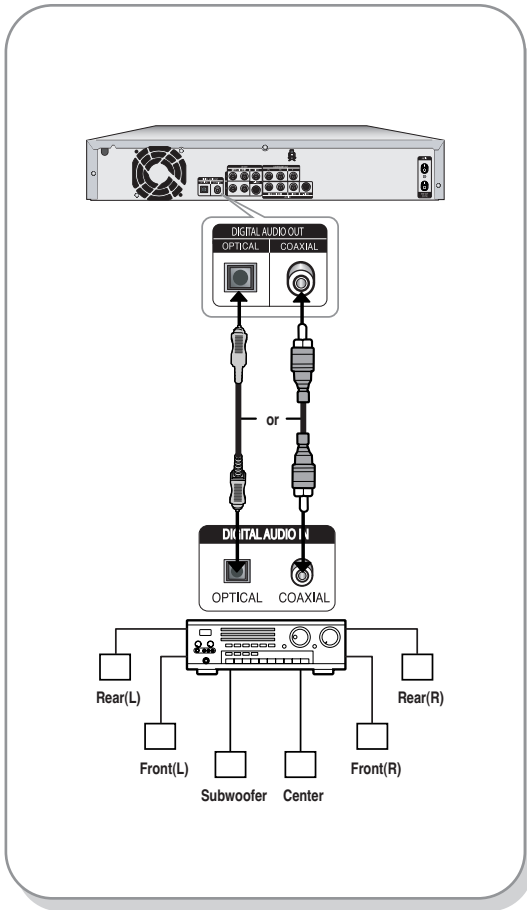
### Method 2 : Connecting to a stereo amplifier with analog input jacks

If your stereo amplifier only has AUDIO INPUT jacks (L and R), use the AUDIO OUT jacks.



### Method 3: Connecting to an AV amplifier with a digital input jack

If your AV amplifier has a Dolby Digital or DTS decoder and a digital input jack, use this connection. To enjoy Dolby Digital or DTS sound, you will need to set up the audio settings. (See page 38)



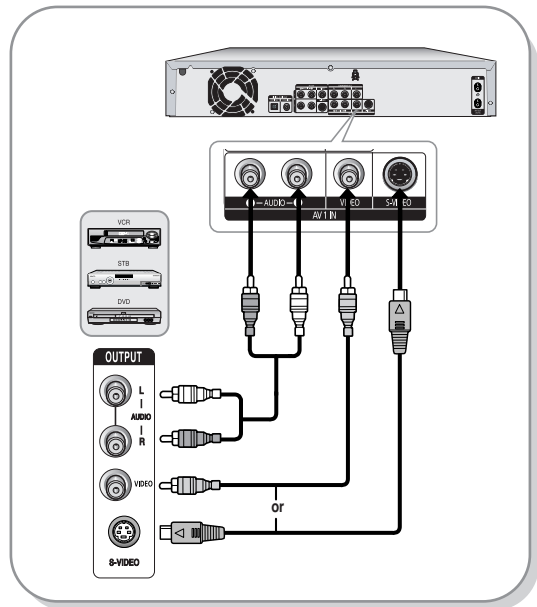
## Step 4 : Connecting External devices

This allows you to connect your HDD & DVD RECORDER to other external devices and view or record their outputs.

- Method 1 : Connecting a VCR, Set-Top Box(STB) or HDD & DVD player to the AV 1 IN jacks
- Method 2 : Connecting a Camcorder to the AV 2 jacks
- Method 3 : Connecting a Camcorder to the DV IN jack

### Method 1 : Connecting a VCR, Set-Top Box(STB) or HDD & DVD player to the AV 1 IN jacks

Connecting a VCR or external device to AUDIO/VIDEO AV 1 IN jacks of the HDD & DVD RECORDER. You can record from connected equipment (VCR, STB or DVD).

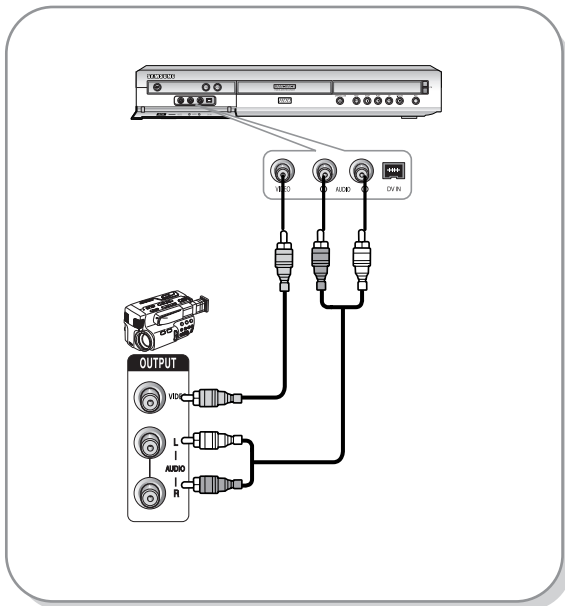


- You can also use the AV 2 IN jacks on the front panel of the HDD & DVD RECORDER.
- When the S-Video jack and Video jack are both connected, the S-Video jack will have priority.
- Copy protected content cannot be recorded.

## Method 2 : Connecting a Camcorder to the AV 2 IN jacks

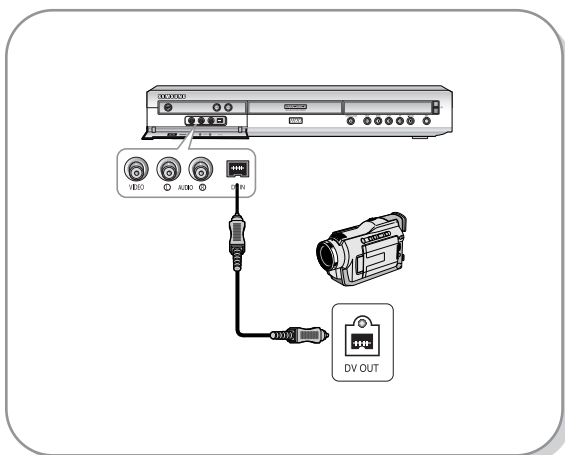
You can also use the AV 2 IN jacks on the front panel of the HDD & DVD RECORDER. You can record from connected equipment, such as a camcorder.

When an input source is inserted into AV 2 while viewing TV, the input will be switched to AV 2 automatically. If the input is not selected automatically, use **INPUT** button to select proper input.



## Method 3 : Connecting a Camcorder to the DV IN jack

If your camcorder has a DV output jack, connect it to the DV input jack of your HDD & DVD RECORDER.

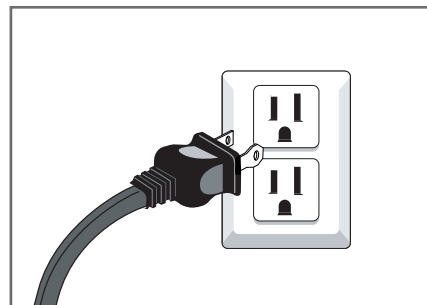


## Step 5 : Connecting the Power Cord

After all connections are complete, plug the power cord in the wall outlet.

**“Auto” appears in the panel display. This means that the current time is being set automatically (Auto Program) through the antenna under connection and also the channel is being set. The setup may take a few minutes.**

When the HDD & DVD RECORDER operates normally, the current time is automatically set and displayed in the front panel display.



- After the current time is set automatically, the recorder will perform Auto Channel Memory for about 3 minutes. If power is on, while Auto Channel Memory is in process, Auto Channel Memory will stop. In this case, do Auto Channel Memory from MENU (See page 30).

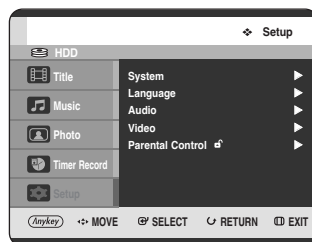


# System Setup

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## On-Screen Menu Navigation

The on-screen menus allow you to enable or disable various functions on your HDD & DVD RECORDER. Use the following buttons to open and navigate through the on-screen menus.



### 1 MENU Button

Press this button on the remote control to open the on-screen menu.  
Press again to exit the on-screen menu.

### 2 ▲▼, ◀▶ Buttons

Press these buttons on remote control to move the selection bar ▲▼, ◀▶ to cycle through the menu options.

### 3 ENTER Button

Press this button on the remote control to confirm any new settings.

### 4 RETURN Button

Press this button on the remote control to return to the Previous menu screen displayed or to exit the on-screen menu.

## OSD Language Setup

After plugging in the recorder, the first time you press the POWER button, this screen comes up. (This screen will only appear when you plug in the recorder for the first time.)

**1** Press the **DVD POWER** button.

**2** Press a number button to select the language.



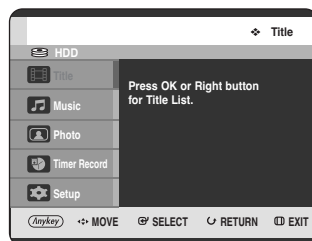
NOTE

- If the language for the startup screen is not set, the settings may change whenever you turn the power on or off. Therefore, make sure that you select the language you want to use.

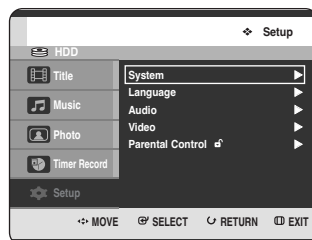
## Auto Clock Set

This menu is used to set the current time. You need to set the time to use timer recording.

**1** With the unit in Stop mode, press the **MENU** button.

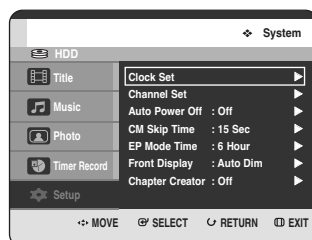


**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.

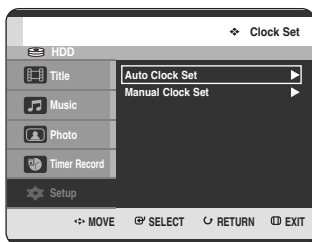


**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button.

- System menu will be displayed.



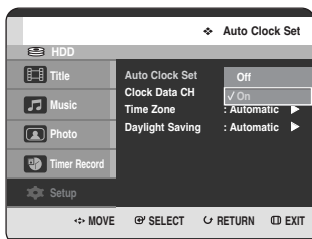
- 4** Press the ▲▼ buttons to select **Clock Set**, then press the **ENTER** or ► button.



- 5** Press the ▲▼ buttons to select **Auto Clock Set**, then press the **ENTER** or ► button.

- 6** Press the ▲▼ buttons to select **Auto Clock Set**, then press the **ENTER** or ► button.

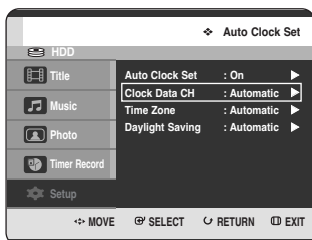
- 7** Press the ▲▼ buttons to select **On**, then press the **ENTER** or ► button.



NOTE

- If your clock is set to the wrong time zone or daylight saving, you can adjust these settings without tuning off the Auto Clock Set function.

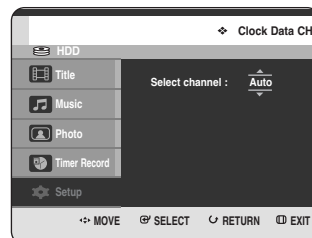
- 8** Select the sub menu(**Clock Data CH**, **Time Zone** or **Daylight Saving**) using the ▲▼ buttons, then press the **ENTER** or ► button.



## Clock Data CH

Select a channel that carries a time signal using the ▲▼ buttons then press the **ENTER** button.

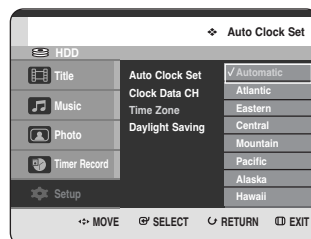
- Select **Auto** to set the clock data channel automatically.



## Time Zone

Select the time zone of your area using the ▲▼ buttons then press the **ENTER** or ► button.

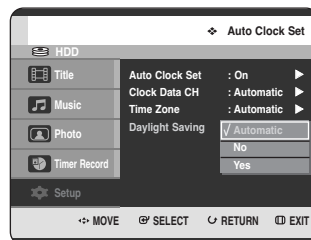
- Select **Automatic** to set the time zone automatically.



## Daylight Saving

Select **Automatic**, **No** or **Yes** using the ▲▼ buttons then press the **ENTER** or ► button.

- Select **Automatic** to set the daylight saving automatically.

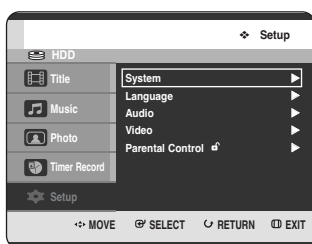


# Manual Clock Set

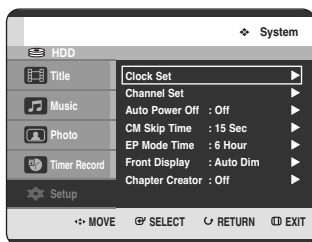
If your clock cannot be set automatically, set the clock manually.

**1** With the unit in Stop mode, press the **MENU** button.

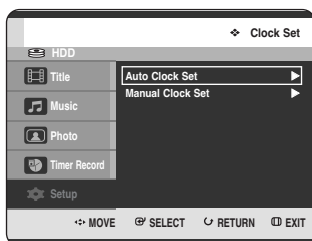
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



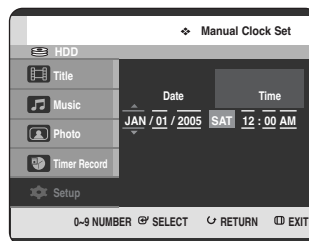
**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button.  
• System menu will be displayed.



**4** Press the **▲▼** buttons to select **Clock Set**, then press the **ENTER** or **▶** button.



**5** Press the **▲▼** buttons to select **Manual Clock Set**, then press the **ENTER** or **▶** button.



**6** Using the **▲▼◀▶** buttons to select the Current Date and Current Time, and then press the **ENTER** button.

When the current time is stored in memory and then the set is powered off, the current time will appear in the front panel display.

**▲▼** : Sets the value  
You can set the value using the number buttons.

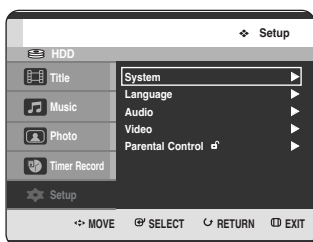
**◀▶** : Moves to items

# Auto Channel Memory

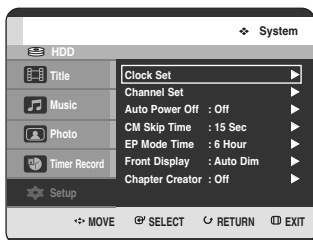
You can set the Antenna/Cable TV settings automatically.

**1** With the unit in Stop mode, press the **MENU** button.

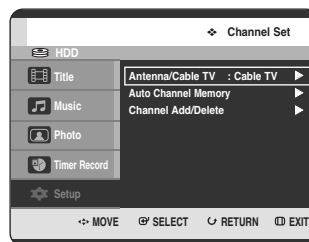
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



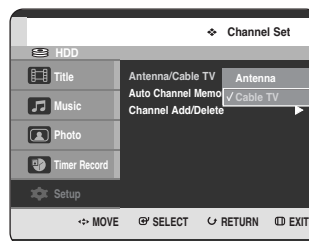
**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button.  
• System menu will be displayed.



**4** Press the **▲▼** buttons to select **Channel Set**, then press the **ENTER** or **▶** button.



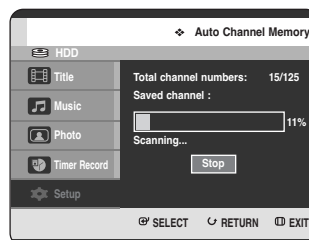
**5** Press the **▲▼** buttons to select **Antenna/Cable TV**, then press the **ENTER** or **▶** button.



Select the item that matches the antenna connection you selected on pages 19~20(Method 1, 2 and 3).

**6** Select **Antenna** or **Cable TV**(depending on the hookup you chose) using the **▲▼** buttons, then press the **ENTER** or **▶** button.

**7** Select **Auto Channel Memory** using the **▲▼** buttons, then press the **ENTER** or **▶** button.  
Auto Channel Memory will be displayed.



- Press the **RETURN** or **ENTER** button to stop Auto Channel Memory.

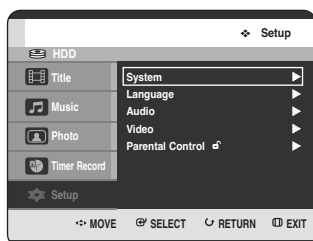
NOTE

# Manual Channel Set

Manual Channel Set can be used after you have first selected Auto Channel Memory. Use the Manual Channel Setting to delete unnecessary channels after using the Auto Channel Memory.

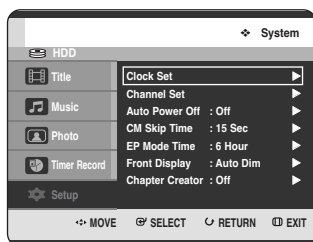
**1** With the unit in Stop mode, press the **MENU** button.

**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.

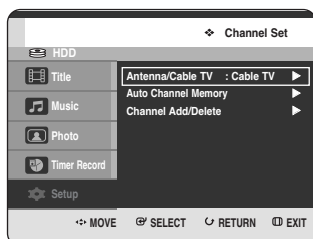


**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button.

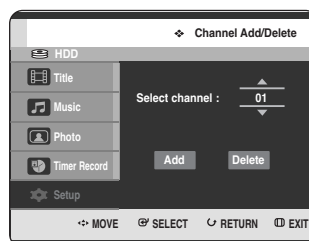
- System menu will be displayed.



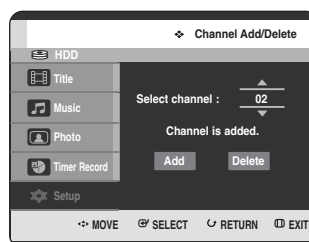
**4** Press the **▲▼** buttons to select **Channel Set**, then press the **ENTER** or **▶** button.



**5** Press the **▲▼** buttons to select **Channel Add/Delete**, then press the **ENTER** or **▶** button.



**6** Press the **▲▼** or number buttons to select the channels you want to add or delete on the **Select channel** screen. Then, press the **ENTER** button.



- Using **▲▼** buttons for channel selection allows the user to add/delete one channel at a time.
- Using **CH** (⏮ ⏭) buttons for channel selection jumps to the next channel memorized in Auto Channel Memory.

**7** Press the **◀▶** buttons to select **Add** or **Delete**, then press the **ENTER** button.

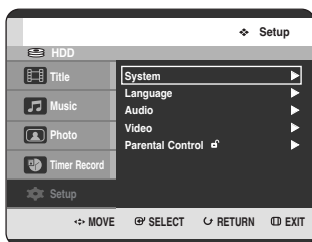
- The message "Channel is added." or "Channel is deleted." will be displayed in the center of the screen.
- Continue to add or delete as many channels as you want to memorize or delete. This can be used to add channels not stored automatically due to weak signal strength.
- Press the **RETURN** button to return to the previous menu. Press the **MENU** button to exit the menu.

# Auto Power Off Setting

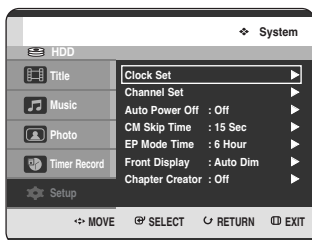
This feature automatically turns off your HDD & DVD RECORDER, if you do not press any button for the selected time.

**1** With the unit in Stop mode, press the **MENU** button.

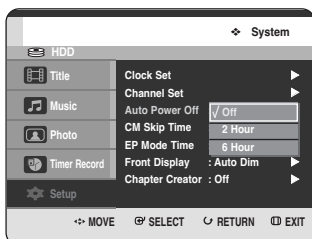
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button. System menu will be displayed.



**4** Press the **▲▼** buttons to select **Auto Power Off**, then press the **ENTER** or **▶** button.



**5** Press the **▲▼** buttons to select the desired item, then press the **ENTER** or **▶** button.

- **Off** : Auto power off is disabled.
- **2 Hour** : HDD & DVD RECORDER will automatically turns off for 2 hours after the last button is pressed.
- **6 Hour** : HDD & DVD RECORDER will automatically turns off for 6 hours after the last button is pressed.

If turn off time set by automatic Power off function is reached during a playback or recording, the device will operate until the playback or recording is over.

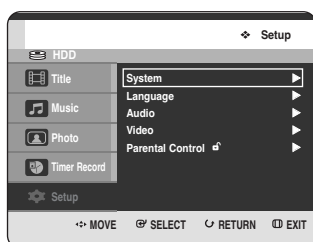


# CM Skip Time Setting

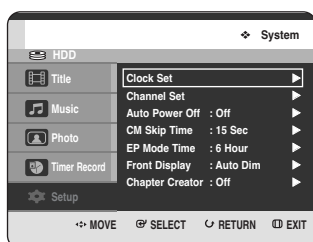
When a program recorded on a HDD, a DVD-RAM, a DVD-RW, or a DVD-R is played, the unit can be set to automatically skip a portion of the program corresponding to a CM (commercial) skip time set by the user.

**1** With the unit in Stop mode, press the **MENU** button.

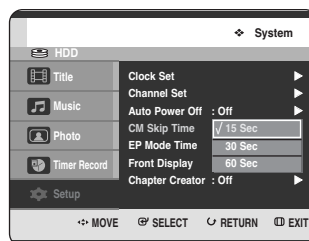
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button. System menu will be displayed.



**4** Press the **▲▼** buttons to select **CM Skip Time**, then press the **ENTER** or **▶** button.



**5** Press the **▲▼** buttons to select the desired time interval, then press the **ENTER** or **▶** button.

**6** If you press the **CM SKIP** button during playback, the section corresponding to the set time is skipped, and then the next section is played.



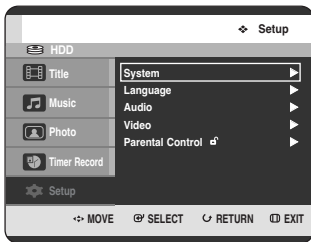
- CM Skip can be performed only during normal playback.
- When the time set is more than a remaining time of a current title: The next title is played from the beginning.
- When the time set is more than a remaining time of a play list, the next scene is played.
- CM Skip does not work in a still picture mode.
- When a set time is less than a remaining time of a scene, a last title, or a last track that is displayed currently, a prohibition mark appears.
- CM Skip releases Repeat (including Repeat A-B, Chapter, and Title).
- CM Skip may not operate with some DVD-Video discs.

# EP Mode Time Setting

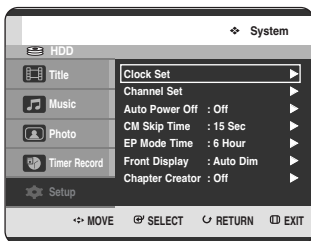
You can select one of four recording modes by pressing the **REC MODE** button repeatedly.  
EP mode is one of four REC modes (XP, SP, LP, EP).  
In EP(Extended Play) mode, you can set recording time to 6 or 8 hours by this setting.

**1** With the unit in Stop mode, press the **MENU** button.

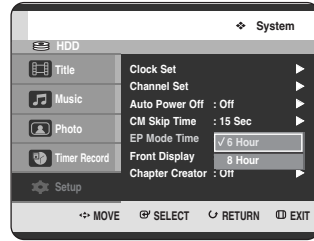
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button.  
System menu will be displayed.



**4** Press the **▲▼** buttons to select **EP Mode Time**, then press the **ENTER** or **▶** button.



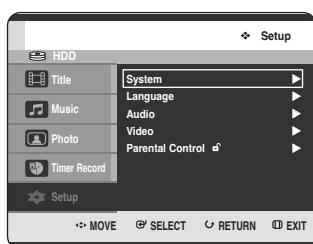
**5** Press the **▲▼** buttons to select the desired time, then press the **ENTER** or **▶** button.

# Setting up the Front Display Options

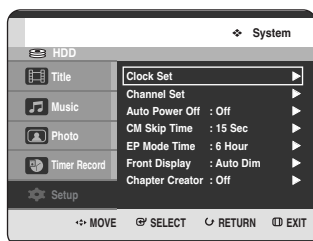
Adjust the brightness of the unit's front panel display.

**1** With the unit in Stop mode, press the **MENU** button.

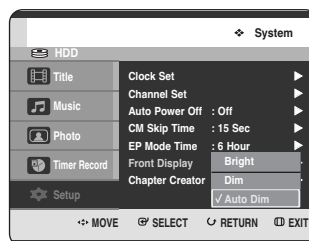
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **►** button.



**3** Press the **▲▼** buttons to select **System**, then press the **ENTER** or **►** button.  
System menu will be displayed.



**4** Press the **▲▼** buttons to select **Front Display**, then press the **ENTER** or **►** button.



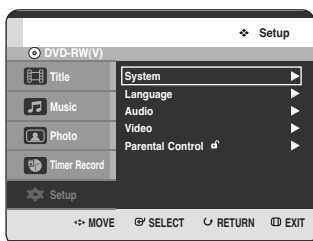
**5** Press the **▲▼** buttons to select the desired item, then press the **ENTER** or **►** button.

- **Bright** : Makes the Front Panel Display bright.
- **Dim** : Makes the Front Panel Display dim.
- **Auto Dim** : Makes the Front Panel Display dim automatically when the set is in power off.

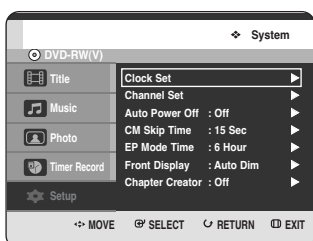
# Automatic Chapter Creator



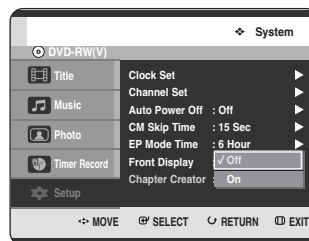
- 1 With the unit in Stop mode, press the **MENU** button.
- 2 Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **System**, then press the **ENTER** or **▶** button. System menu will be displayed.



- 4 Press the **▲▼** buttons to select **Chapter Creator**, then press the **ENTER** or **▶** button.

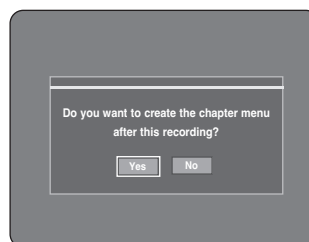


- 5 Press the **▲▼** buttons to select the desired item, then press the **ENTER** or **▶** button.

- **Off**: Select this option when you do not want Automatic Chapter Creator.
- **On**: Select this option when you want Automatic Chapter Creator.

Press the **MENU** button to exit the menu.

- 6 Press the **REC** button to start recording. (See page 77 about how to set recording speed) The message "Do you want to create the chapter menu after this recording?" is displayed.



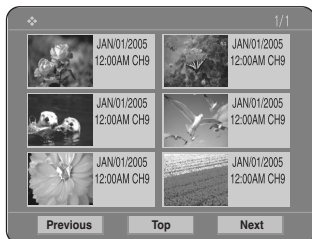
- 7 Press the **◀▶** buttons to select **Yes** and press the **ENTER** button.
  - A new chapter is created according to the selected recording mode. A chapter will be about 5 minutes long in XP and SP, and about 15 minutes long in LP and EP mode.

---

**8** Press the **STOP** button to stop recording.

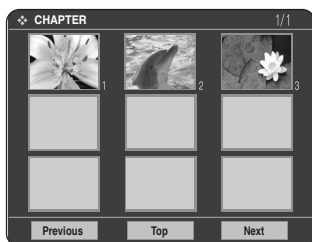
---

**9** To display the created titles, finalize the disc (See page 121) and then press the **TITLE MENU** button. Title menu will be displayed.



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**10** To display the created chapters, select the desired Title and then press the **DISC MENU** button. The chapter menu for the selected Title will be displayed.



**Caution**

- The Automatic Chapter Creator function does not work during Timer Recording or when you turn the power off.

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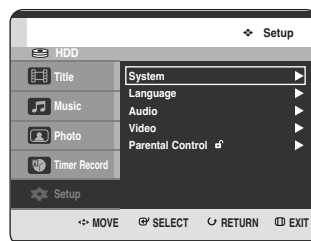
## Setting up the Language Options

If you set the On-Screen menu, disc menu, audio and subtitle language in advance, they will come up automatically every time you watch a movie. If the selected language is not recorded on the disc, the original pre-recorded language is selected.

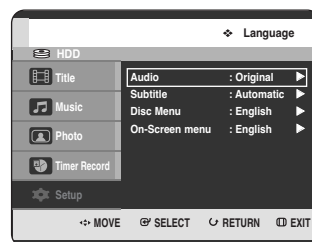
---

**1** With the unit in Stop mode, press the **MENU** button.

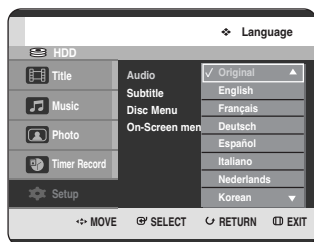
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



**3** Press the **▲▼** buttons to select **Language**, then press the **ENTER** or **▶** button. Language setup menu will be displayed.



- 4** Press the ▲▼ buttons to select the desired language option, press the **ENTER** or ► button.



- **Audio** : For the disc audio language.
- **Subtitle** : For the disc subtitles.
- **Disc Menu**: For the disc menu contained on the disc
- **On-Screen Menu**: For the on-screen menu of your HDD & DVD RECORDER.

- 5** Press the ▲▼ buttons to select the desired language, then press the **ENTER** or ► button.



NOTE

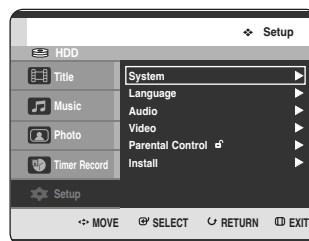
- Press the **RETURN** or ◀ button to return to the previous menu. Press the **MENU** button to exit the menu.
- The selected language will only appear if it is supported on the disc.

## Setting up the Audio Options

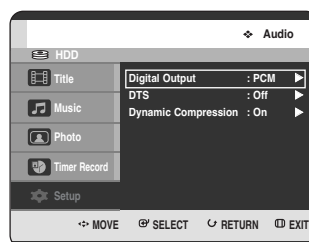
You can connect the HDD & DVD RECORDER to an external amp or Home theater. Allow you to setup the Audio device and sound status depending on the audio system in use.

- 1** With the unit in Stop mode, press the **MENU** button.

- 2** Press the ▲▼ buttons to select **Setup**, then press the **ENTER** or ► button.



- 3** Press the ▲▼ buttons to select **Audio**, then press the **ENTER** or ► button. Audio setup menu will be displayed.



- 4** Press the ▲▼ buttons to select the desired audio option, then press the **ENTER** or ► button.

- 5** Press the ▲▼ buttons to select the desired item, then press the **ENTER** or ► button.



NOTE

- Press the **RETURN** or ◀ button to return to the previous menu. Press the **MENU** button to exit the menu.

## Digital Output

1. PCM : Select this when you have no equipment that can decode Dolby Digital (or MPEG-2) signal. When you play Dolby Digital (or MPEG-2) sound track, the digital output are converted to PCM Stereo.
2. Bitstream : Output Dolby Digital (or MPEG-2) audio as bitstream. Select this when your AV receiver or AV amplifier have Dolby Digital (or MPEG-2) Decoder.



NOTE

- Digital output setting is equally applied to both Dolby Digital and MPEG-2 audio. LPCM sound track is always outputted as PCM. It has no relation with Digital Output setting.
- Be sure to select the correct Digital Output or you will hear no sound or loud noise.

## DTS

1. Off : Doesn't output DTS signal. Select this when your AV receiver or AV amplifier does not have DTS decoder.
2. On : Outputs DTS Bitstream via digital output when you play DTS track. Select this only when your AV receiver (or AV amplifier) have DTS decoder.



NOTE

- When DTS soundtrack is played, sound does not output from AV Audio Output.

## Dynamic Compression

This is only active when a Dolby Digital signal is detected.

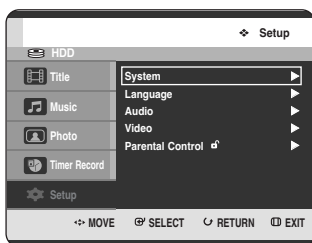
1. On : When Movie soundtracks are played at low volume or from smaller speakers, the system can apply appropriate compression to make low-level content more intelligible and prevent dramatic passages from getting too loud.
2. Off : You can enjoy the movie with the standard Dynamic Range.

# Setting up the Video display Options

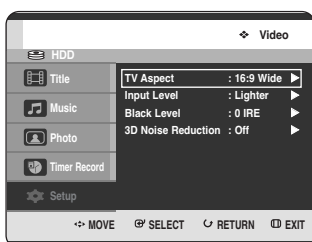
This function allows you to setup the TV screen settings. This function depends on disc type. It may not work for some disc types.

- 1 With the unit in Stop mode, press the **MENU** button.

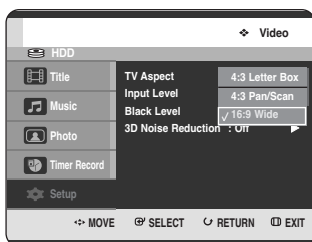
- 2 Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **Video**, then press the **ENTER** or **▶** button. Video setup menu will be displayed.



- 4 Press the **▲▼** buttons to select the desired video option, then press the **ENTER** or **▶** button.



- 5 Press the **▲▼** buttons to select the desired item, then press the **ENTER** or **▶** button.



NOTE

- Press the **RETURN** or **◀** button to return to the previous menu.  
Press the **MENU** button to exit the menu.

## TV Aspect

Depending on the type of television you have, you may want to adjust the screen setting. (aspect ratio)

1. 4:3 Letter Box : Select when you want to see the total 16:9 ratio screen DVD supplies, even though you have a TV with a 4:3 ratio screen. Black bars will appear at the top and bottom of the screen.
2. 4:3 Pan/Scan : Select this for conventional size TV when you want to see the central portion of the 16:9 screen. (Extreme left and right side of movie picture will be cut off.)
3. 16:9 Wide : You can view the full 16:9 picture on your widescreen TV.

## Input Level

Adjusts the level of the input signal.

1. Darker : If you feel the screen is too light and you want to make the screen darker.
2. Lighter : If you feel the screen is too dark and you want to make the screen lighter.

## Black Level

Adjusts the black level of the screen.

1. 0 IRE : This is the standard NTSC reference black level for consistent brightness/contrast across all sources. Select this when you want darker screen.
2. 7.5 IRE : This will enhance the black level for increased brightness/contrast when viewing DVDs. Select this when you want lighter screen.

## 3D Noise Reduction (motion adaptive noise reduction)

1. Off : Normal
2. On : Provides a cleaner picture through noise reduction (for recording).

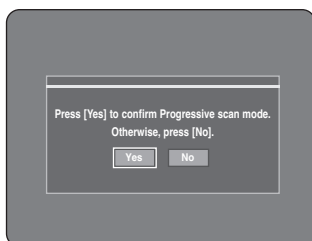


## Setting up the Progressive scan

If the TV supports Progressive Scan, press the **P.SCAN** button on the front of the HDD & DVD RECORDER to enjoy. If you select 'progressive', the component cable has to be connected at first.

(See page 22)

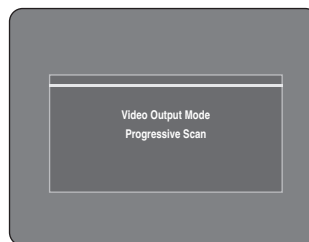
- 1 With the unit in Stop mode, press the **P.SCAN** button on the front of the HDD & DVD RECORDER. The message "Press [Yes] to confirm Progressive scan mode. Otherwise, press [No]." will appear. Press the ◀ ▶ buttons to select **Yes**, and then press the **ENTER** button.



- 2 The message "Please, set your TV to Progressive input. To deactivate, press [STOP] key." will appear. Press the **ENTER** button.



- 3 The message "Video Output Mode Progressive Scan" will appear.

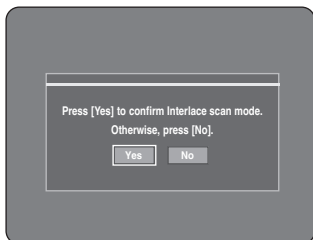


- If the **P.SCAN** button on the HDD & DVD RECORDER's front panel is pressed during playback, the message "This function is possible only on stop mode" appears on the screen.
- Progressive setting is only available when the HDD & DVD RECORDER is in stop mode.

# Canceling the Progressive scan



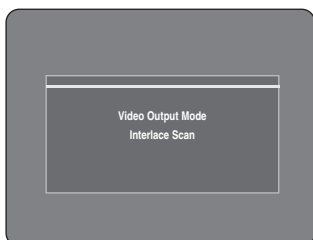
- 1 With the unit in Stop mode, press the **P.SCAN** button on the front of the HDD & DVD RECORDER. The message “Press [Yes] to confirm Interlace scan mode. Otherwise, press [No].” will appear. Press the ◀ ▶ buttons to select **Yes**, and then press the **ENTER** button.



- 2 The message “Please, set your TV to Interlace input. To deactivate, press [STOP] key.” will appear. Press the **ENTER** button.



- 3 The message “Video Output Mode Interlace Scan” will appear.



## NOTE

- Do not press the **P.SCAN** button if you are using a TV that does not support Progressive mode. Nothing will be displayed on the screen if pressed.
- If you press the **P.SCAN** button by mistake when your TV does not support Progressive mode, you need to release the Progressive mode. To release the Progressive mode, press the **P.SCAN** button on the front panel 3 times. The screen will recover after the PS ○ indicator on the front panel display turns off.

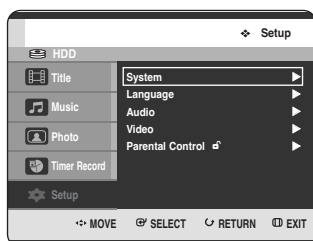
# Setting up the Parental Control

The Parental Control function works in conjunction with DVDs that have been assigned a rating which helps you control the types of DVDs that your family watches. There are up to 8 rating levels on a disc.

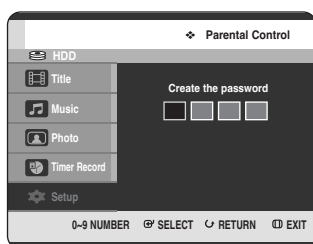


**1** With the unit in Stop mode, press the **MENU** button.

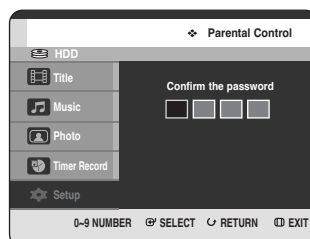
**2** Press the **▲▼** buttons to select **Setup**, then press the **ENTER** or **▶** button.



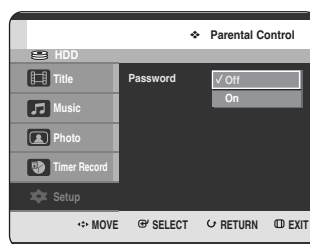
**3** Press the **▲▼** buttons to select **Parental Control**, then press the **ENTER** or **▶** button.



**4** Enter the 4-digit password using the number buttons on the remote control. The “Confirm the password” message will be displayed. Enter your password again.



**5** Press the **ENTER** or **▶** button to select Password.



**6** Press the **▲▼** buttons to select **On** or **Off**, then press the **ENTER** or **▶** button.



NOTE

- Press the **RETURN** or **◀** button to return to the previous menu. Press the **MENU** button to exit the menu.

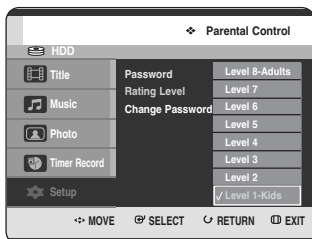
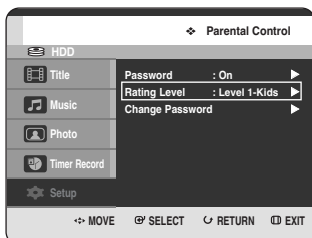
## If you forgot your password

**1** Remove the disc.

**2** Press and hold the **PLAY** (▶) and **STOP** (⏻) button on the front panel for 5 seconds or more.

## About the Rating Level

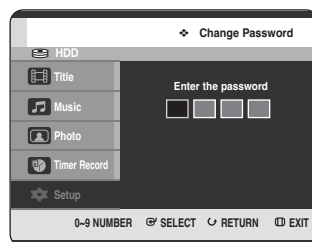
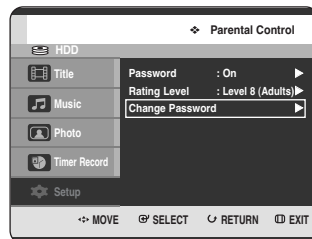
- 1 Press the ▲▼ buttons to select **Rating Level**, then press the **ENTER** or ► button.



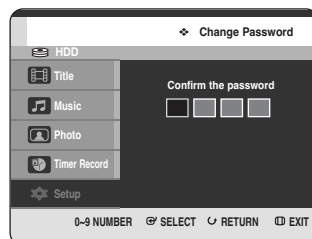
- 2 Press the ▲▼ buttons to select the rating level you want, then press the **ENTER** or ► button.
- 3 When you operate your HDD & DVD RECORDER for the first time, the "Create the Password" message will be displayed. For example, if you select up to Level 6, discs that contain Level 7, 8 will not play. A larger number indicates that the program is intended for adult use only.

## About the Change Password

- 1 Press the ▲▼ buttons to select **Change Password**, then press the **ENTER** or ► button.



- 2 Enter the 4-digit password using the number buttons on the remote control. The "Confirm the password" message will be displayed.



- 3 Enter your password again using the number buttons on the remote control.



NOTE

- See page 43 if you forgot your password.

# Playback

This section introduces basic functions of playback and playback by disc type.



Dolby Digital



DTS



Digital Audio



Stereo



NTSC broadcast system in U.S.A, Canada, Korea, Japan, etc.



MP3

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## Before Playing

Read the following information before playing a disc.

### Region code (DVD-Video only)



Both the HDD & DVD RECORDER and the discs are coded by region. These regional codes must match in order for the disc to play. If the codes do not match, the disc will not play.



The Region Number for this HDD & DVD RECORDER is described on the rear panel of the HDD & DVD RECORDER.

### Disc types that can be played

Disc Types	Disc Logo	Recorded content	Disc Shape	Max. Playing Time
DVD-VIDEO		AUDIO + VIDEO	Single sided(5")	240
			Double sided(5")	480
			Single sided(3.5")	80
			Double sided(3.5")	160
VCD		AUDIO + VIDEO	Single sided(5")	74
			Single sided(3.5")	20
AUDIO-CD		AUDIO	Single sided(5")	74
			Single sided(3.5")	20
DVD-RAM		AUDIO + VIDEO	Single-sided 5" (4.7GB)	1 (XP: Excellent Quality)
				2 (SP: Standard Quality)
			Double-sided 5" (9.4GB)	4 (LP: Long Playback)
				6 or 8 (EP: Extended)
DVD-RW		AUDIO + VIDEO	5" (4.7GB)	2 (XP: Excellent Quality)
				4 (SP: Standard Quality)
				8 (LP: Long Playback)
				12 or 16 (EP: Extended)
DVD-R		AUDIO + VIDEO	5" (4.7GB)	1 (XP: Excellent Quality)
				2 (SP: Standard Quality)
				4 (LP: Long Playback)
				6 or 8 (EP: Extended)
CD-RW/R		JPEG	-	-
DVD-RAM/-RW/-R		MP3	-	-
HDD		AUDIO + VIDEO		Approx. 29 (XP: Excellent Quality) Approx. 55 (SP: Standard Quality) Approx. 106 (LP: Long Playback) Approx. 157 or Approx. 208 (EP: Extended)

### Discs that cannot be played

- DVD-Video with a region number other than "1" or "ALL"
- 12cm 2.6 GB and 5.2 GB DVD-RAM
- 3.9 GB DVD-R Disc for Authoring.
- DVD-RAM/-RW (VR mode) not recorded following the Video Recording Standard
- Unfinalized DVD-R, unfinalized DVD-RW (V mode) recorded on other equipment.
- PAL Disc
- DVD-ROM/DVD+RW/PD/MV-Disc/DiVX Video Disc, etc.
- CVD/SVCD/CD-ROM/CDV/CD-G/CD-I



NOTE

- This HDD & DVD RECORDER can only operate with discs that are compatible with DVD-RAM Standard Version 2.0.
- Playback and/or recording may not work for some types of discs, or when specific operations, such as angle change and aspect ratio adjustment, are being performed. Information about the discs is written in detail on the box. Please refer to this if necessary.
- Do not allow the disc to become dirty or scratched, finger prints, dirt, dust, scratches or deposits of cigarette smoke on the recording surface may make it impossible to use the disc for recording.
- DVD-RAM/-RW/-R discs may not be able to play on some DVD players, depending on the player, disc and the condition of the recording.
- Discs with PAL programs recorded on them cannot be recorded using this product.

## Playing a Disc



1

Press the **OPEN/CLOSE** button.

2

Place a disc gently into the tray with the disc's label facing up.

3

Press **OPEN/CLOSE** button to close the disc tray.

- Your HDD & DVD RECORDER closes the disc tray and plays the disc automatically.
- The recorder does not play discs automatically after the initial power on.
- When the recorder is powered on and a disc is in the tray, the unit will be activated and wait in stop status.
- Press the **PLAY**(▶) button to start playback.
- If you insert an MP3 Disc, your HDD & DVD RECORDER will display the file list on the screen and start playing.
- If you insert a JPEG Disc, folders and files are displayed in the thumbnail picture.
- If you want the unit to play automatically when it is powered on with a disc in the unit, power on with the **PLAY**(▶) button.

4

Press the **STOP**(■) button to stop playback.



NOTE

- When you stop playing back a disc, the HDD & DVD RECORDER remembers where you stopped, so when you press **PLAY**(▶) button again, it will pick up where you left off. (Unless the disc is removed or the HDD & DVD RECORDER is unplugged, or if you press the **STOP**(■) button twice.).



Caution

- Do not move your HDD & DVD RECORDER while playing, as this may cause damage to the disc.
- Make sure to press the **OPEN/CLOSE** button to open or close the disc tray.
- Do not push the disc tray while it is being opened or closed, as this may cause a product malfunction.
- Do not place foreign materials on or in the disc tray.
- Some functions may perform differently or be disabled depending on the disc type. If this occurs, refer to the instructions written on the disc case.
- Be especially careful that children's fingers are not caught between the disc tray and the tray chassis when it closes.
- You must only insert one DVD disc at a time. Inserting two or more discs will not allow playback and may cause damage to the HDD & DVD RECORDER.

# Using the Disc Menu & Title Menu

Some type of discs contain a dedicated menu system that allows you to select special functions for title, chapter, audio track, subtitle, film preview, information on characters, etc.

## Disc Menu



**1** Press the **DISC MENU** button to enter the disc menu of the disc.

- Move to the setup menu related to playback operation.
- You can select audio language and subtitle etc. provided by the disc.
- When playing a VCD2.0, you can choose Menu On or Menu Off by using the **DISC MENU** button.

## Title Menu



**1** Press the **TITLE MENU** button to move to the title menu of the disc.

- Press this button if the disc contains more than one title. Some discs may not support the title menu functionality.

## For HDD/DVD-RAM/-RW/-R Disc



**1** Press the **TITLE LIST** button to display title list.



NOTE

- **Title List** : Title List shows a list to help you select a title. Since the title list consists of the information on video stream that is actually recorded, if one title is deleted, that title cannot be played again.
- **Play List** : This refers to a unit of playback, which is made by selecting a desired scene in the entire Title List. When one playlist is played, only the scene selected by the user will play and then stop. Since only the information necessary for playing a desired scene is included in a playlist, even if that playlist is deleted, the original recording will not be deleted. (only VR mode)

# Using the Search & Skip Functions

## Searching through a Chapter or Track



**1** During play, press the **SEARCH** (⏮ ⏭) buttons on the remote control.

HDD/ DVD-VIDEO/ DVD-RAM/-RW/-R	▶▶ Fast X 2 → ▶▶ Fast X 4 → ▶▶ Fast X 8 → ▶▶ Fast X 16 → ▶▶ Fast X 32 → ▶▶ Fast X 128
AUDIO CD (CD-DA)/VCD	▶▶ X 2 → ▶▶ X 4 → ▶▶ X 8 → ↻

- You can scan the program in reverse. To return to normal speed playback, press the **PLAY** (⏮) button.
- When you press and hold the **SEARCH** (⏮ ⏭) buttons, playback is done at the default speed of X4. If you release the **SEARCH** (⏮ ⏭) buttons, playback is performed at a normal speed.
- The speed marked in this function may be different from the actual playback speed.



NOTE

- No sound is heard during Scan(Search) mode, except CDs (CD-DA).

## Skipping Chapters, a Tracks or Markers

During play, you can search quickly through a chapter or track.

**1** During play, press the **SKIP** (⏮ ⏭) buttons on the remote control.

- **If you press the SKIP (⏮) button,**  
it moves to the beginning of the chapter or track or marker(HDD/DVD-RAM/-RW(VR mode)). Pressing the button once again within 3 seconds returns to the beginning of the previous chapter or track or marker(HDD/DVD-RAM/-RW(VR mode)).
- **If you press the SKIP (⏭) button,**  
it moves to the next chapter, track or marker (HDD/DVD-RAM/-RW(VR mode)).



NOTE

- This function will not operate if a selected title does not have Chapters, Tracks or Markers.

## Slow Motion Play/ Step Motion Play

### Slow Motion Play



In pause or step mode, press the **SEARCH** (⏮ ⏭) buttons on the remote control.

- **If you press the SEARCH (⏮)button,**  
▶ Slow 1/8 → ▶ Slow 1/4 → ▶ Slow 1/2
- **If you press the SEARCH (⏭) button,**  
◀ Slow 1/8 → ◀ Slow 1/4 → ◀ Slow 1/2
- **To return to normal speed playback, press the PLAY (▶) button.**

Press and hold the **SEARCH** (⏮ ⏭) buttons during pause, the disc will play slowly at a 1/4 speed. If the button is released, the pause operation will resume.



NOTE

- The speed marked in this function may be different from the actual playback speed.
- Slow motion play operates only in the forward direction on VCD discs.



## Step Motion Play



Press the **STEP**(◀▶) buttons on the remote control in the pause mode.

- Each time the button is pressed, a new frame will appear.

When the **STEP**(◀) button is pressed, the previous frame will be activated.

When the **STEP**(▶) button is pressed, the next frame will be activated.

- To return to normal speed playback, press the **PLAY**(▶) button.



NOTE

- Step motion play operates only in the forward direction on VCD discs.

## About ANYKEY



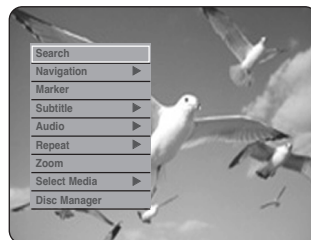
The ANYKEY function allows you to easily search for a desired scene by accessing title, chapter, track, time. You can also change the subtitle and audio settings and set some features including Marker, Angle, Zoom, Repeat, Select Media, Disc Manager.

### Moving to a scene directly using the ANYKEY

- If you want to move to a title, a chapter or a track to find a desired scene.



- Press the **ANYKEY** button during playback.



- Press the ▲▼ buttons to select **Search**, then press the **ENTER** or ► button.



**3** Press the ▲▼ buttons to select **Title**, **Chapter** or **Track**.

**4** Press the ◀▶ buttons or number buttons to select the desired scene, then press the **ENTER** button.

• If you want to move to a desired time following will help you find a scene.



NOTE

- This may not work for some discs. When an audio CD(CD-DA) or an MP3 disc is inserted, according to a disc type, the information display may not appear.
- The Time Search function does not operate in some discs.
- To make the screen disappear, press the **ANYKEY** button again

**1** Press the **ANYKEY** button during playback.



**2** Press the ▲▼ buttons to select **Search**, then press the **ENTER** or ▶ button.



**3** Press the ▲▼ buttons to select **Time**.

**4** Enter the time in the sequence of hours, minutes, and seconds using the number buttons, then press the **ENTER** button.

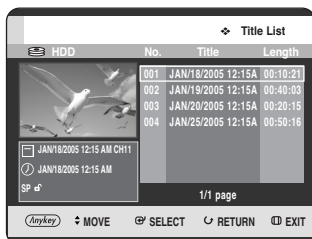
# Playing the Title List

Follow these instructions to play back a scene from the Title List.



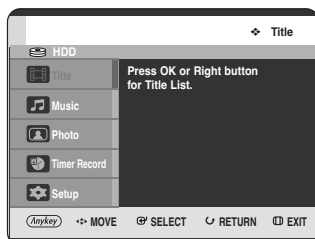
## Using the TITLE LIST button

- 1 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.

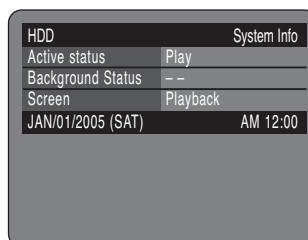


- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

- 2 Press the **▲▼** buttons to select an entry you want to play from Title List, then press the **ENTER** or **PLAY (⏵)** button.  
The selected entry (title) will be played back.

## - About INFO button -

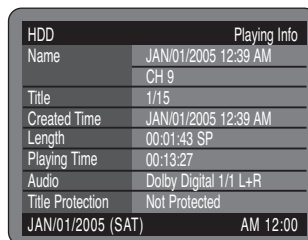
If you press the **INFO** button during a playback, Pressing the **INFO** button once, the system information screen appears.: Displays Active Status, Background Status, and Main Screen information.



Pressing the **INFO** button twice, Disc information screen appears.: Displays Total numbers of Titles and Playlists, Recordable Time(Title), Available Space(Music/Photo).



Pressing the **INFO** button three times, Current playback information screen appears.: Displays information of Playback Name, Title, Created Time, Length, Playing Time, Audio, and if the disc protection is activated.



- 3 To stop title play, press the **STOP(⏏)** button.  
To return the title list screen, press the **TITLE LIST** button.

# Navigation Menu

## Scene Navigation

If there is a title composed of markers (see page 55), you can search the desired scene using the Scene Navigation.

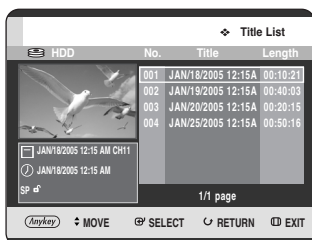


(VR mode)



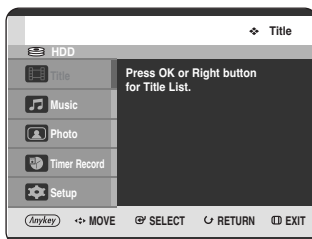
### Using the TITLE LIST button

- 1 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



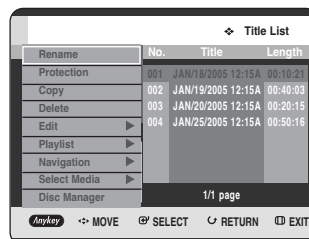
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.

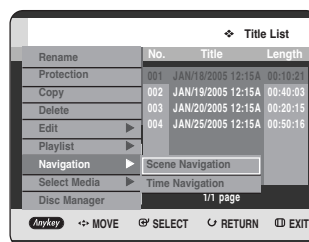


- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

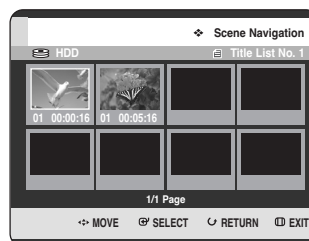
- 2 Press the **▲▼** buttons to select an entry you want to play from Title List, then press the **ANYKEY** button.



- 3 Press the **▲▼** buttons to select **Navigation**, then press the **ENTER** or **▶** button.



- 4 Press the **▲▼** buttons to select **Scene Navigation**, then press the **ENTER** or **▶** button.

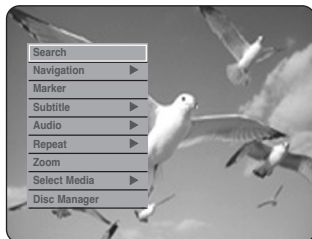


- 5 Press the **▲▼◀▶** buttons to select desired scene, then press the **ENTER** or **PLAY (⊕)** button.



## Using the ANYKEY button

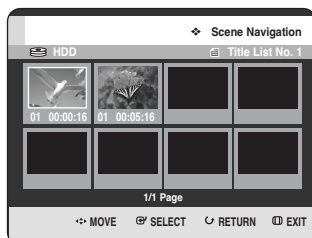
- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Navigation**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **Scene Navigation**, then press the **ENTER** or **▶** button.



- 4 Press the **▲▼◀▶** buttons to select desired scene, then press the **ENTER** or **PLAY** (⏮) button.



- Scene Navigation will not operate if a selected title does not have Markers.

## Time Navigation



(VR mode)

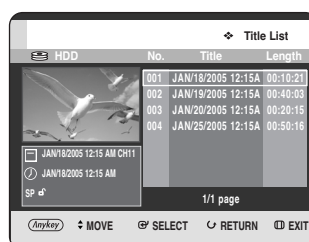
Using this function, you can search scene minute-by-minute from the recorded title list.



## Using the TITLE LIST button

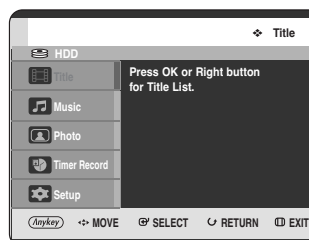
- 1 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.

The Title List screen is displayed.



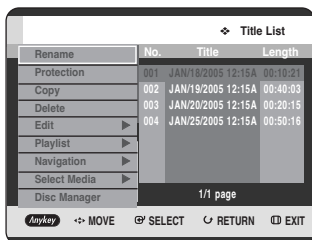
## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.

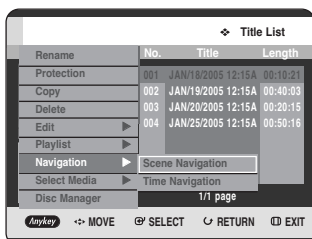


- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

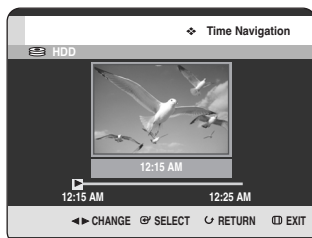
- Press the ▲▼ buttons to select an entry you want to play from Title List, then press the **ANYKEY** button.



- Press the ▲▼ buttons to select **Navigation**, then press the **ENTER** or ► button.



- Press the ▲▼ buttons to select **Time Navigation**, then press the **ENTER** or ► button.

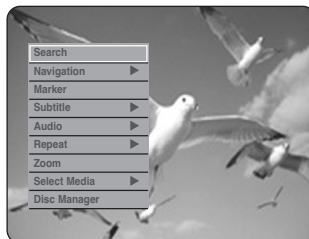


- Press the ◀▶ buttons to skip one minute at a time and search the desired scene, then press the **ENTER** or **PLAY** (⏮) button.

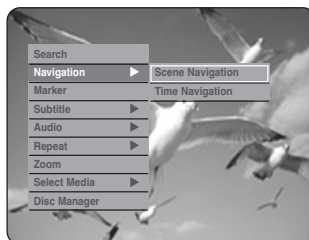
ANYKEY

## Using the ANYKEY button

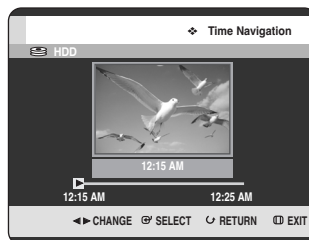
- Press the **ANYKEY** button during playback.



- Press the ▲▼ buttons to select **Navigation**, then press the **ENTER** or ► button.



- Press the ▲▼ buttons to select **Time Navigation**, then press the **ENTER** or ► button.



- Press the ◀▶ buttons to skip one minute at a time and search the desired scene, then press the **ENTER** or **PLAY** (⏮) button.



NOTE

- Cursor does not move if selected recorded title is shorter than 1 minute.
- A disc that has not been recorded by this device may not operate Navigation function.
- An edited title may not display exact search time.

# Using the Markers

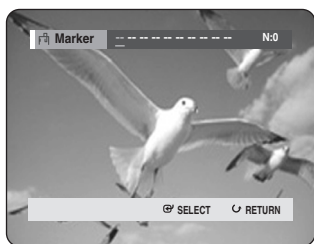


(VR mode)



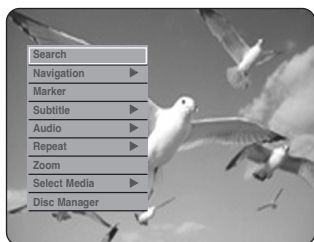
## Using the MARKER button

- 1 Press the **MARKER** button during playback.



### Using the ANYKEY button.

- Press the **ANYKEY** button during playback.



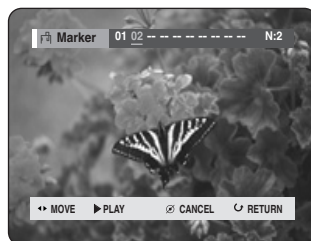
- Press the **▲▼** buttons to select **Marker**, then press the **ENTER** or **▶** button.

- 2 Press the **ENTER** button when the desired scene appears.
  - The number **01** is displayed and the scene is memorized.



- 3 Press the **◀▶** buttons to move to the next position.

- 4 Press the **ENTER** button again when the desired scene appears.
  - The number **02** is displayed and the scene is memorized.



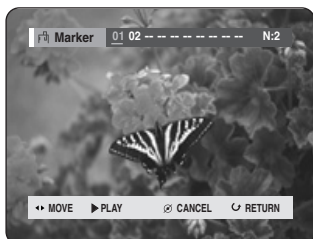
- HDD, DVD-RAM or DVD-RW (VR Mode) discs have the Marker function instead of the Bookmark function. The Marker function allows you to mark up to 99 scenes. Since the scenes may be displayed as many different pages, numbering is necessary. If a disc in use is encoded with Disc Protection, Markers cannot be set or deleted. Only playback is available.

## Playing back a marker



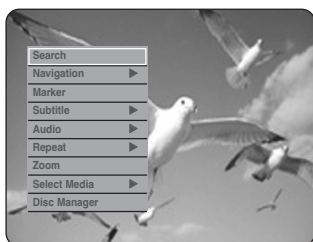
### Using the MARKER button

- 1 Press the **MARKER** button during playback.



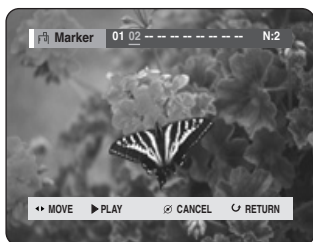
### Using the ANYKEY button.

- Press the **ANYKEY** button during playback.



- Press the **▲▼** buttons to select **Marker**, then press the **ENTER** or **▶** button.

- 2 Press the **◀▶** buttons to select a marked scene.



- 3 Press the **ENTER** or **PLAY** (**▶**) button to start playing from the selected scene.

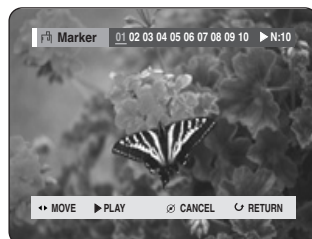
- If you press the **SKIP** (**⏮**) button, it moves to the beginning of the marker. Pressing the button once again within 3 seconds returns to the beginning of the previous marker.
- If you press the **SKIP** (**⏭**) button, it moves to the next marker.

## Clearing a marker



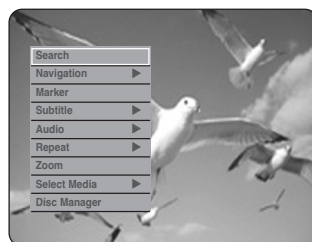
### Using the MARKER button

- 1 Press the **MARKER** button during playback.



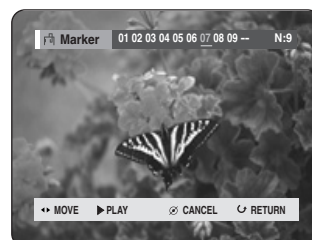
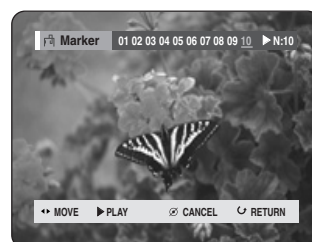
### Using the ANYKEY button.

- Press the **ANYKEY** button during playback.



- Press the **▲▼** buttons to select **Marker**, then press the **ENTER** or **▶** button.

- 2 Press the **◀▶** buttons to select a marked scene. Press the **CANCEL** button to delete the selected mark.





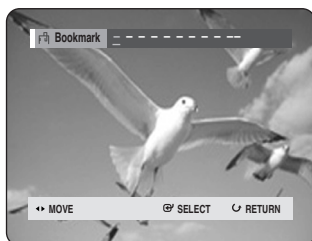
- When a marker is cleared while HDD/DVD-RAM/-RW (VR mode) is playing, marker numbers will change. For example, if the 7th marker is cleared after ten markers are registered, the marker numbers after the eighth will automatically move ahead by one and the 8th marker becomes the 7th.

## Using the Bookmarks



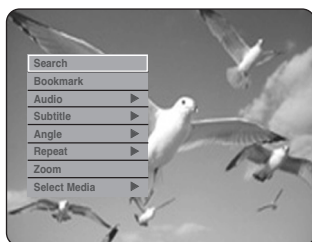
### Using the MARKER button

- 1 Press the **MARKER** button during playback.



### Using the ANYKEY button.

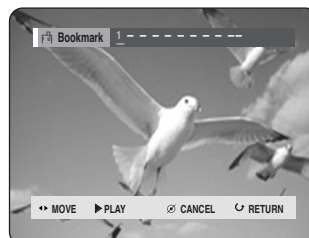
- Press the **ANYKEY** button during playback.



- Press the **▲▼** buttons to select **Bookmark**, then press the **ENTER** or **▶** button.

- 2 Press the **ENTER** button when the desired scene appears.

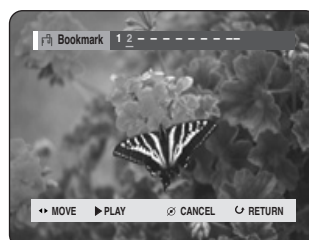
- The number 1 is displayed and the scene is memorized.



- 3 Press the **◀▶** buttons to move to the next position.

- 4 Press the **ENTER** button again when the desired scene appears.

- The number 2 is displayed and the scene is memorized.



- Repeat above to bookmark other positions.
- You can bookmark up to 10 scenes.



#### NOTE

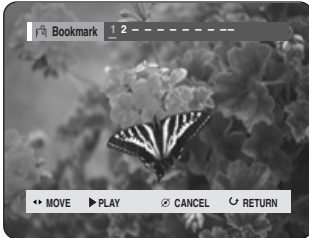
- When the disc tray is opened and then closed, bookmarks will disappear.
- When VCD2.0 is in Menu Off mode only, this function works. (See page 47)

## Playing back a bookmark



### Using the MARKER button

- 1 Press the **MARKER** button during playback.



### Using the ANYKEY button.

- Press the **ANYKEY** button during playback.



- Press the **▲▼** buttons to select **Bookmark**, then press the **ENTER** or **▶** button.

- 2 Press the **◀▶** buttons to select a bookmarked scene.

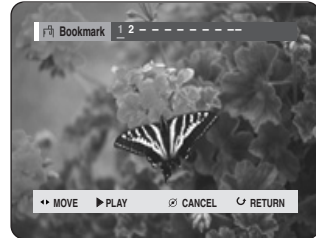
- 3 Press the **ENTER** or **PLAY(▶)** button to start playing from the selected scene.

## Clearing a bookmark



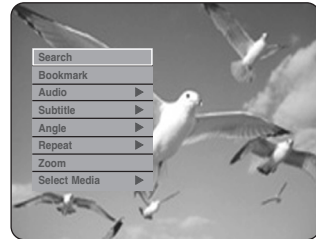
### Using the MARKER button

- 1 Press the **MARKER** button during playback.



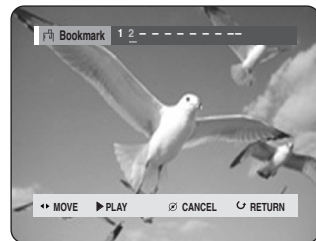
### Using the ANYKEY button.

- Press the **ANYKEY** button during playback.



- Press the **▲▼** buttons to select **Bookmark**, then press the **ENTER** or **▶** button.

- 2 Press the **◀▶** buttons to select a bookmarked scene.



- 3 Press the **CANCEL** button to delete the selected bookmark.

# Selecting the Subtitle Language

Selects one of the subtitle language recorded on the disc.

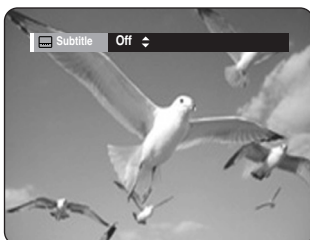


(VR mode)



## Using the SUBTITLE button

- 1 Press the **SUBTITLE** button during playback.

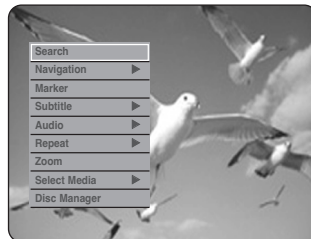


- 2 Press the **▲▼** buttons to select the desired subtitle language. Also, press the **SUBTITLE** button repeatedly to select the desired subtitle language.
  - To make the screen disappear, press the **CANCEL** or **RETURN** button.

ANYKEY

## Using the ANYKEY button

- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Subtitle**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select the desired subtitle language, then press the **ENTER** or **▶** button.



NOTE

- The subtitle display may be different depending on the disc type.
- Some discs allow you to select the language for the disc menu only.
- If the subtitle overlap, disable the caption function on your TV.

# Selecting the Soundtracks & Audio Channels

## Selecting the Audio

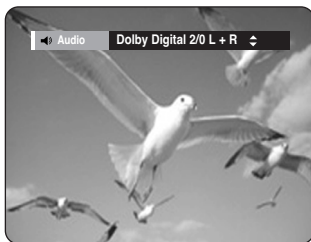
Selects one of the soundtracks recorded on the disc. Also selects the audio channels.



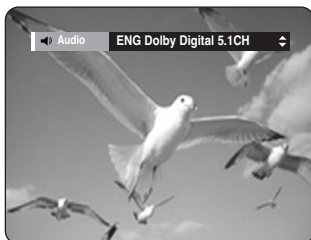
### Using the AUDIO button

- 1 Press the **AUDIO** button during playback.

HDD/DVD-RAM/-RW



DVD-VIDEO

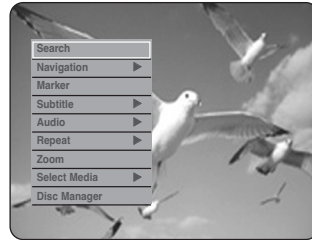


- 2 Press the **▲▼** buttons to select the desired soundtracks or audio channel. Also, press the **AUDIO** button repeatedly to select the desired soundtracks or audio channel.
  - To make the screen disappear, then press the **CANCEL** or **RETURN** button.

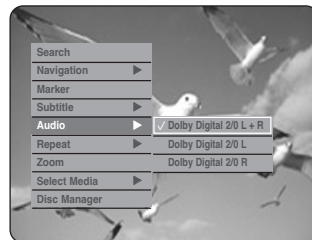
ANYKEY

### Using the ANYKEY button

- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Audio**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select the desired soundtracks or audio channel, then press the **ENTER** or **▶** button.



NOTE

- Soundtracks or Audio channel may be different because they are disc-specific.
- Some discs allow you to select the audio language for the disc menu only.

# Changing the Camera Angle

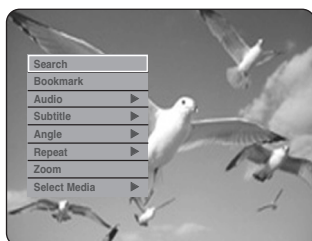
When a HDD & DVD RECORDER contains multiple angles of a particular scene, you can select the Angle function.



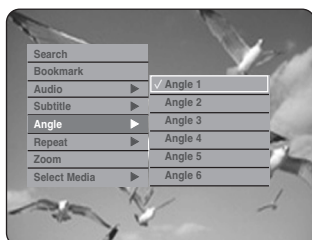
ANYKEY

## Using the ANYKEY button

- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Angle**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select the desired angle, then press the **ENTER** or **▶** button.



NOTE

- This function is disc-dependent, and may not work all DVDs.
- This function does not work when a DVD has not been recorded with a multi-camera angle system.

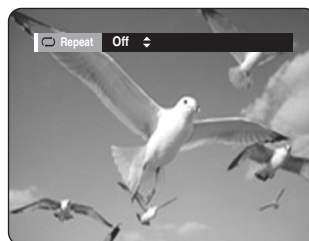
# Repeat Play

## Playing Repeatedly(Repeat Playback)

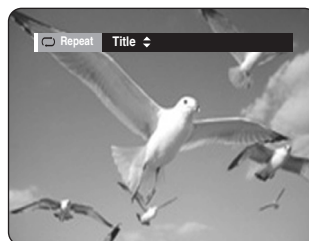


## Using the REPEAT button

- 1 Press the **REPEAT** button during playback.



- 2 Press the **▲▼** buttons to select the **Off**, **Title** or **Chapter** you want to play repeatedly, then press the **ENTER** button.



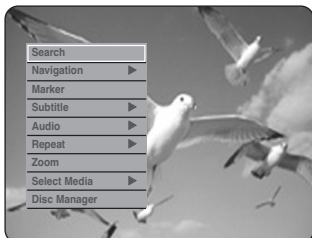
NOTE

- When VCD2.0 is in Menu Off mode only, this function works. (See page 47)

ANYKEY

## Using the ANYKEY button

- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select the **Repeat**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **Repeat Off**, **Repeat A-B**, **Repeat Title**, **Repeat Track** or **Repeat Chapter** you want to play repeatedly, then press the **ENTER** or **▶** button.



NOTE

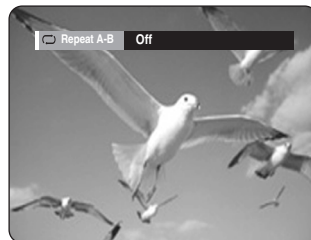
- HDD/DVD-RAM/-RW(VR mode), unfinalized DVD-R and unfinalized DVD-RW (V mode) do not repeat a chapter.

## Repeat A-B

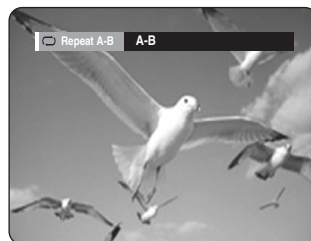


## Using the REPEAT A-B button

- 1 Press the **REPEAT A-B** button during playback.



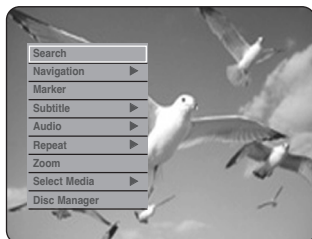
- 2 Press the **ENTER** button at the point where you want the repeat play to start (A) and press it again at the point where you want the repeat play to stop (B). Repeat playback of the A-B section starts.



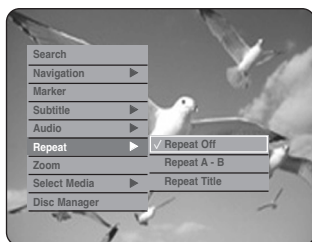


## Using the ANYKEY button

- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Repeat**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **Repeat A-B**, then press the **ENTER** or **▶** button.

- 4 Press the **ENTER** button at the point where you want the repeat play to start (A) and press it again at the point where you want the repeat play to stop (B). Repeat playback of the A-B section starts.

### - To return to normal playback -

- 5 Press the **CANCEL** button to return to normal playback.



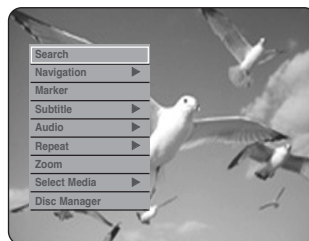
NOTE

- If you set point (B) before five seconds has lapsed, the prohibition mark (⊘) will appear.
- You can also activate Normal Playback by pressing the **CANCEL** button.
- Audio CDs(CD-DA) and MP3 discs do not support the Repeat A-B function.
- This function operates when VCD 2.0 is in the Menu Off mode only.

## Zooming-In



- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Zoom**, then press the **ENTER** or **▶** button. (⧻) will be displayed.



- 3 Press **▲▼◀▶** buttons to move to the area you want to enlarge.

- 4 Press the **ENTER** button.  
The screen will be enlarged to twice the normal size. The screen size will be enlarged to four times the normal size.

HDD/DVD-VIDEO/ DVD-RAM/-RW/-R	normal size → x2 → x4 → x2 → normal size
VCD	normal size → x2 → normal size



NOTE

- When recording is done in the EP mode, the Zoom function will not be supported except when the recording has been done in V mode.
- This function operates when VCD 2.0 is in the Menu Off mode only.

## Select Media



- 1 Press the **ANYKEY** button during playback.



- 2 Press the **▲▼** buttons to select **Select Media**, then press the **ENTER** or **▶** button.

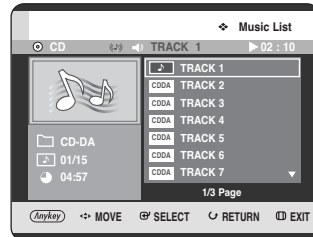


- 3 Press the **▲▼** buttons to select **HDD** or **DVD**, then press the **ENTER** or **▶** button.

## Playing an Audio CD/MP3

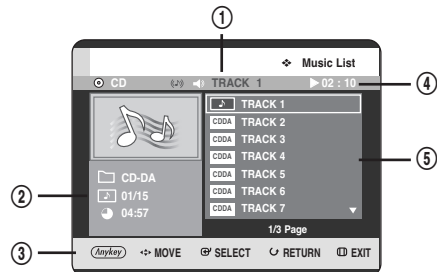
### Playing an Audio CD(CD-DA)

- 1 Insert an audio CD (CD-DA) into the disc tray.
  - The audio CD menu appears and the tracks (songs) are played automatically.



- 2 Press the **▲▼** buttons to select the track (song) you want to hear, and then press the **ENTER** button.

### Audio CD(CD-DA) Screen Elements



1. **Current track (song):** Displays the number of the track currently being played.
2. Displays the current play index, total track number.
3. Display available buttons.
4. This shows the operating state of a disc and a playback time corresponding to a portion that is currently played.
5. Displays the track list (song list).



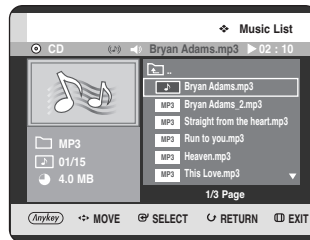
## Buttons on the Remote Control used for Audio CD(CD-DA) playback



1. **▲▼**: Selects a track (song).
2. **◀▶**: Move the page up/down.
3. **ENTER button**: Plays the selected track (song).
4. **SKIP (⏮) button**: Plays the next track.
5. **SKIP (⏭) button**: Returns to the beginning of the current track when pressed during playback. If pressed again, your HDD & DVD RECORDER moves to and plays the previous track. If you press the this button within three seconds after playback starts, the previous track will be played. If you press the this button after three seconds, the current track will be replayed from the beginning.
6. **Press the SEARCH (⏮⏭) buttons**: Fast Play (X2, X4, X8)
7. **STOP (⏹) button**: Stops a track(song).
8. **PLAY (⏮) button**: Plays a track(song) or pauses playback.
9. **ANYKEY button**: The ANYKEY menu is displayed. (Play Mode, Go To Playlist or New Playlist).

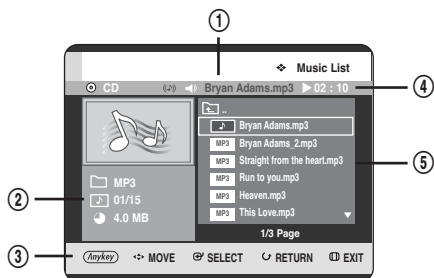
## Playing an MP3 Disc

- 1 Insert an MP3 disc into the disc tray.
  - The MP3 menu is displayed and the tracks (songs) are played automatically.



- 2 Press the **▲▼** buttons to select the track you want to hear, and then press the **ENTER** button.

## MP3 Screen Elements



1. **Current track (song)**: Displays the name of the track being played.
2. Displays the current folder, play index and current track size.
3. Displays available buttons.
4. This shows the operating state of a disc and a playback time corresponding to a portion that is currently played.
5. Displays the information for the folder and its tracks.



NOTE

- If a disc contains only MP3 files or only JPEG files, the MP3 or JPEG screen appears after the disc is loaded.
- If a disc contains a mix of MP3 and JPEG files, you need to select Music for MP3 files or Photo for JPEG files.

## Buttons on the Remote Control used for MP3 playback



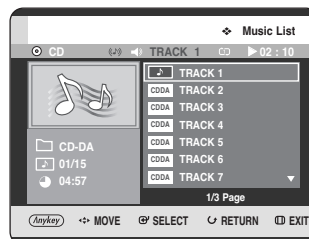
1. **▲▼**: Selects a track (song).
2. **◀▶**: Move the page up/down.
3. **ENTER button**: Plays the selected track (song).
4. **SKIP (⊕) button**: Plays the next track.
5. **SKIP (⊖) button**: Returns to the beginning of the current track when pressed during playback. If pressed again, your HDD & DVD RECORDER moves to and plays the previous track.  
If you press the this button within three seconds after playback starts, the previous track will be played. If you press the this button after three seconds, the current track will be replayed from the beginning.
6. **STOP (⊙) button**: Stops a track(song).
7. **PLAY (⊙) button**: Plays a track(song) or pauses playback.
8. **ANYKEY button**: The ANYKEY menu is displayed. (Copy, Play Mode, Go To Playlist, New Playlist or Select Media).

## Repeat CD (CD-DA) & MP3

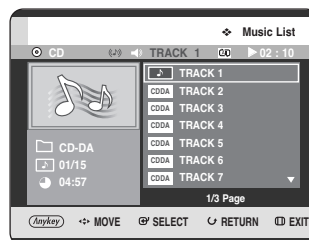


### Using the REPEAT button.

- 1 Press the **REPEAT** button during playback.



- 2 Press the **REPEAT** button repeatedly to select the repeat mode you want.



- **Repeat Track (CD (CD-DA)/MP3)**
- **Repeat Folder (MP3)**
- **Repeat All (CD (CD-DA)/MP3)**
- **Random (CD (CD-DA)/MP3)**: The random option plays a disc's track in random order.
- **Normal (CD (CD-DA)/MP3)**: Track on a disc are played in the order in which they were recorded on the disc.

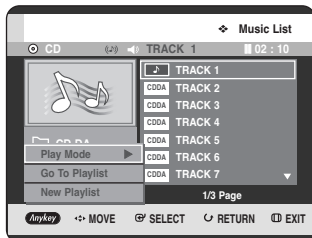
### - To return to normal playback -

- 3 Press the **REPEAT** or **CANCEL** button repeatedly to return to normal playback.

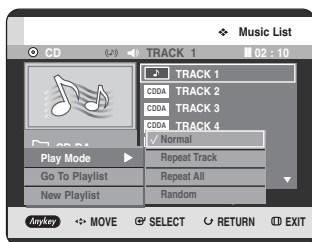


## Using the ANYKEY button.

- 1 Press the **ANYKEY** button during the Music List playback.



- 2 Press the **▲▼** buttons to select **Play Mode**, then press the **ENTER** or **▶** button.

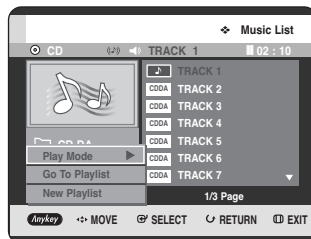


- 3 Press the **▲▼** buttons to select desired play mode, then press the **ENTER** or **▶** button.
  - **Normal (CD (CD-DA)/MP3)**: Track on a disc are played in the order in which they were recorded on the disc.
  - **Repeat Track (CD (CD-DA)/MP3)**
  - **Repeat Folder (MP3)**
  - **Repeat All (CD (CD-DA)/MP3)**
  - **Random (CD (CD-DA)/MP3)**: The random option plays a disc's track in random order.

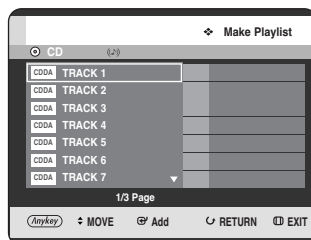
## New Playlist

You can register a maximum 28 tracks in the playlist.

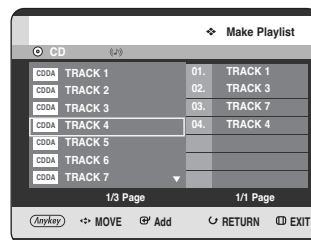
- 1 Press the **ANYKEY** button during the Music List playback.



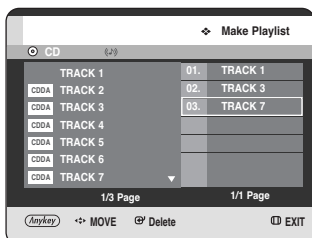
- 2 Press the **▲▼** buttons to select **New Playlist**, then press the **ENTER** or **▶** button.



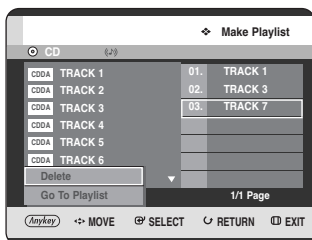
- 3 Press the **▲▼** buttons to select tracks in order in which you want them to play, then press the **ENTER** button.



- 4 If you playlisted a wrong track, press the ►▲▼ buttons to select wrong track, then press the **ENTER** or **CANCEL** button. The wrong track will be removed.



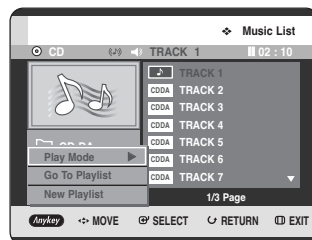
- 5 To store the playlist, press the **ANYKEY** button.



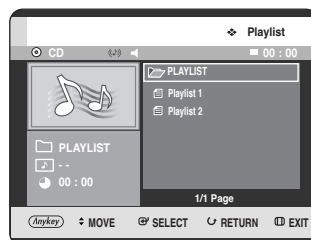
- 6 Press the ▲▼ buttons to select the **Go To Playlist**, then press the **ENTER** button. A new Playlist will be created.

## Go To Playlist

- 1 Press the **ANYKEY** button during the Music List playback.



- 2 Press the ▲▼ buttons to select **Go To Playlist**, then press the **ENTER** or ► button.

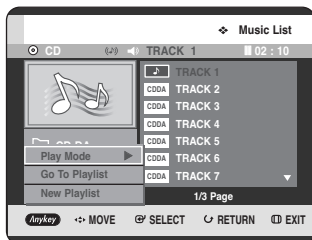


- 3 Press the ▲▼ buttons to select the desired playlist folder, then press the **ENTER** button.

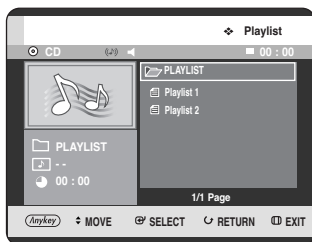
- 4 The selected tracks are played automatically.

## Delete the Playlist

- 1 Press the **ANYKEY** button during the Music List playback.

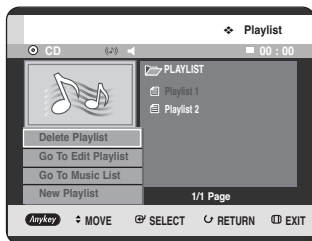


- 2 Press the **▲▼** buttons to select **Go To Playlist**, then press the **ENTER** or **▶** button.

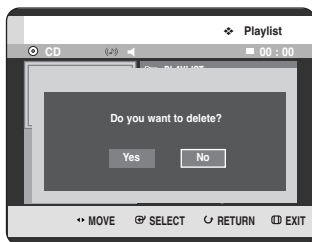


- 3 Press the **▲▼** buttons to select the Playlist you want to delete.

- 4 Press the **ANYKEY** button.



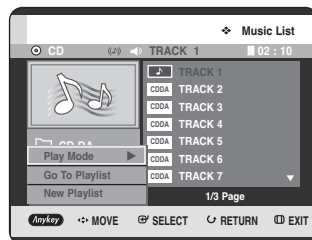
- 5 Press the **▲▼** buttons to select the **Delete Playlist**, then press the **ENTER** or **▶** button.



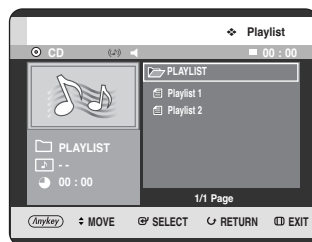
- 6 Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The selected Playlist is deleted.

## Go To Edit Playlist

- 1 Press the **ANYKEY** button during the Music List playback.

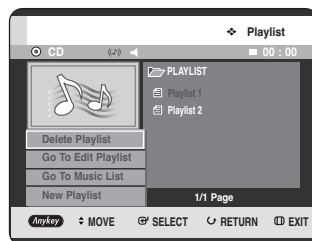


- 2 Press the **▲▼** buttons to select **Go To Playlist**, then press the **ENTER** or **▶** button.

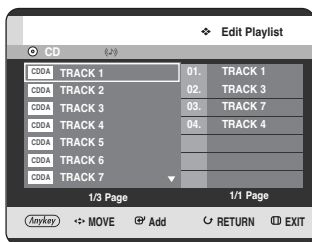


- 3 Press the **▲▼** buttons to select the **Playlist** you want to edit.

- 4 Press the **ANYKEY** button in playlist mode.



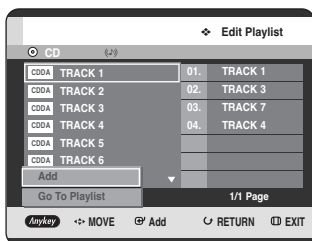
- 5 Press the ▲▼ buttons to select the **Go To Edit Playlist**, then press the **ENTER** or ► button.



- 6 Press the ▲▼ buttons to select tracks in order in which you want them to play, then press the **ENTER** button.

- 7 If you playlisted a wrong track, press the ►▲▼ buttons to select wrong track, then press the **ENTER** or **CANCEL** button.

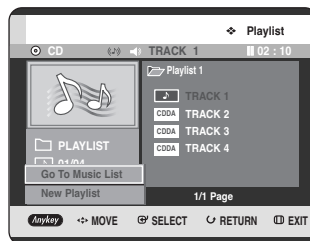
- 8 To store the playlist, press the **ANYKEY** button.



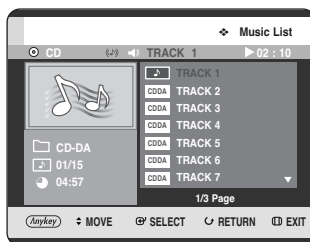
- 9 Press the ▲▼ buttons to select the **Go To Playlist**, then press the **ENTER** button. Playlist will be edited.

## Go To Music List

- 1 Press the **ANYKEY** button during the Playlist playback.

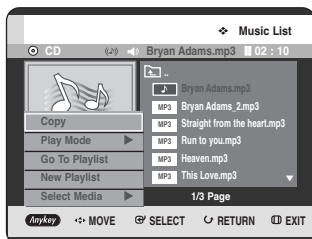


- 2 Press the ▲▼ buttons to select **Go To Music List**, then press the **ENTER** or ► button.

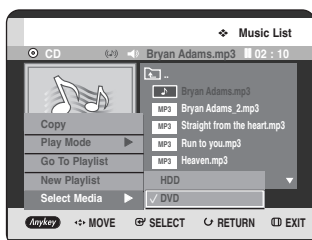


## Select Media (MP3)

- 1 Press the **ANYKEY** button.



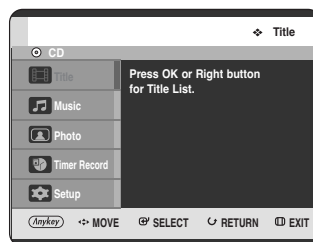
- 2 Press the **▲▼** buttons to select **Select Media**, then press the **ENTER** or **▶** button.



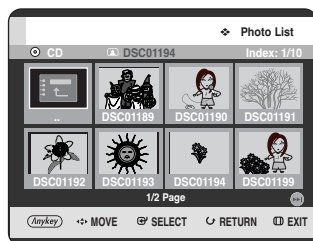
- 3 Press the **▲▼** buttons to select **HDD** or **DVD**, then press the **ENTER** or **▶** button.  
If there are no mp3 files on the selected media, it notifies you that there are no mp3 files and the media will not be switched.

## Playing a Picture

- 1 Insert a JPEG disc or Mixed disc (JPEG + MP3) into the disc tray.



- 2 Press the **▲▼** buttons to select **Photo**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼◀▶** buttons to select a picture.
  - To see the next 8 pictures, press the **SKIP(▶▶)** button.
  - To see the previous 8 pictures, press the **SKIP(◀◀)** button.



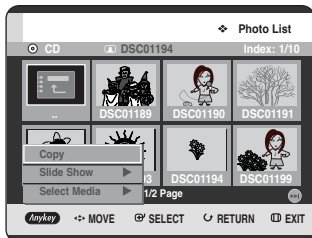
NOTE

- If a disc contains only MP3 files or only JPEG files, the MP3 or JPEG screen appears after the disc is loaded.
- If a disc contains a mix of MP3 and JPEG files, you need to select Music for MP3 files or Photo for JPEG files.

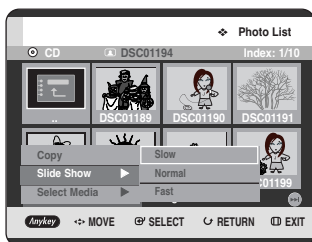
## Slide Show

To set up, follow steps 1~3 in page 71.

- 4 Press the **ANYKEY** button.



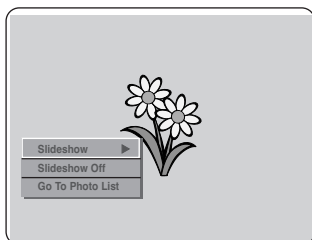
- 5 Press the **▲▼** buttons to select **Slide Show**, then press the **ENTER** or **▶** button.



- 6 Press the **▲▼** buttons to select the slide show speed, then press the **ENTER** or **▶** button. The slide show starts.

### - To stop the Slide Show -

- 1 Press the **ANYKEY** button.

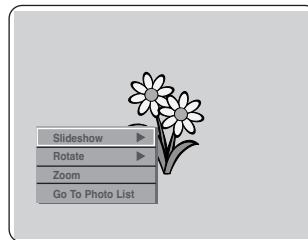


- 2 Press the **▲▼** buttons to select **Slideshow Off**, then press the **ENTER** or **▶** button.

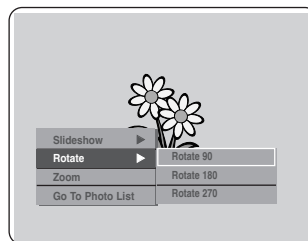
## Rotate

To set up, follow steps 1~3 in page 71.

- 4 Press the **ENTER** button to select you want to see the picture, then press the **ANYKEY** button.



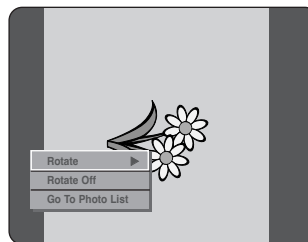
- 5 Press the **▲▼** buttons to select **Rotate**, then press the **ENTER** or **▶** button.



- 6 Press the **▲▼** buttons to select the rotate angle, then press the **ENTER** or **▶** button.

### - To stop the Rotate -

- 1 Press the **ANYKEY** button.



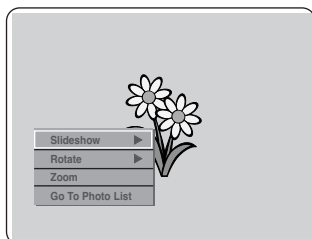
- 2 Press the **▲▼** buttons to select **Rotate Off**, then press the **ENTER** or **▶** button.



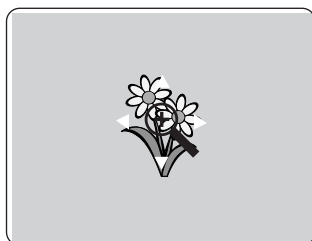
## Zoom

To set up, follow steps 1~3 in page 71.

- 4** Press the **ENTER** button to select you want to see the picture, then press the **ANYKEY** button.



- 5** Press the **▲▼** buttons to select **Zoom**, then press the **ENTER** or **▶** button.

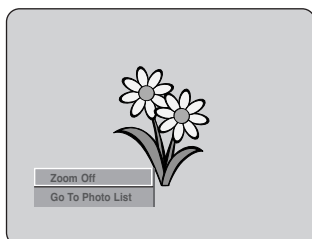


- 6** Each time the **ENTER** button is pressed, the picture is enlarged up to x4(four times the normal size).

→ X2 → X4 → X2 → Normal

### - To stop the Zoom -

- 1** Press the **ANYKEY** button.

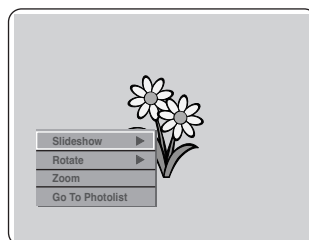


- 2** Press the **▲▼** buttons to select **Zoom Off**, then press the **ENTER** or **▶** button.

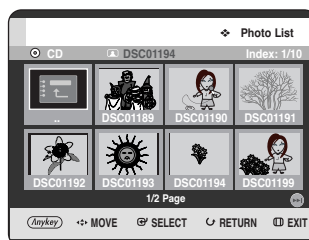
## Go To Photo List

To set up, follow steps 1~3 in page 71.

- 4** Press the **ENTER** button to select you want to see the picture, then press the **ANYKEY** button.



- 5** Press the **▲▼** buttons to select **Go To Photo List**, then press the **ENTER** or **▶** button.



# Recording

This section shows various HDD & DVD Recording methods.




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Deleting a Timer Record List .....	86
Go To History List .....	87

## Before Recording

This unit can record on various types of discs. Before recording, read the following instructions and select the disc type according to your preference.

### Recordable Discs

This recorder can record on the following discs.

HDD	DVD-RAM	DVD-RW	DVD-R
<b>HDD</b>			

- DVD-RWs and DVD-RAMs are rewritable.
- DVD-Rs are non-rewritable

### Compatibility between Samsung and Other Company's Recorder

Disc Types	Recording format	Recording Device	Finalizing	Additional Recording in Samsung Recorder
DVD-RAM	VR Mode	Samsung	X	Recordable
		Other Company	X	Recordable
DVD-RW	VR Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Recordable
	V Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
DVD-R	V Mode	Samsung	finalized	Not recordable
			not finalized	Recordable
		Other Company	finalized	Not recordable
			not finalized	Not recordable



NOTE

- Finalize
  - This closes the DVD-RW/-R so no additional recording can be done.
- Unfinalize
  - This allows additional recording on a DVD-RW disc originally recorded on the HDD & DVD RECORDER.
  - A DVD-RW disc that has been recorded by DAO(Disc At Once) in a PC cannot be unfinalized.
  - A DVD-RW disc that has been recorded in Video Mode of a different maker's recorder cannot be unfinalized.
  - A DVD-R disc cannot be unfinalized.

## Recording Formats

When you insert an unused disc, the following message appears. Since available functions differ depending on the disc type, select a disc that best fits your preferences.

DVD-RAM: Use after formatting the disc.



DVD-RW: When unused DVD-RW disc is first inserted, the message "Uninitialized Disc Do you want to initialize this disc?" will be displayed. If you select **Yes**, the disc will be formatted in VR mode.

If you want to change the mode, refer to Formatting a Disc on page 118.



DVD-R: Formatting DVD is unnecessary and only Video Mode Recording is supported.

### DVD-RW(V mode)/-R

- Chapters will be created automatically when you finalize recording on DVD-RW/-R discs in Video mode. The chapter's length (interval between chapters) varies according to the recording mode.
- Simple editing (erasing titles/changing title name)

### DVD-RAM/-RW(VR mode)

- This mode allows multiple editing functions (such as deletion of the whole title, partial deletion of a title, etc.)
- Various editing options using a created Playlist.

## Recording Mode

Select one of four recording modes by pressing the **REC MODE** button repeatedly while the unit is in Stop mode for the desired recording time and picture quality. In general, picture quality improves as the recording time decreases. In FR mode, the most suitable record mode is adjusted automatically, according to remaining time on the disc and length of the timer recording. This function is selected only one mode in XP, SP, LP and EP modes and you can use this mode for timer recording.

Recording Mode	Recording Times	
	HDD (120GB)	DVD-RAM/-RW/-R
XP (high quality mode)	Approx. 29 hours	Approx. 1 hour about 8.5 Mbps
SP (standard quality mode)	Approx. 55 hours	Approx. 2 hours about 4.5 Mbps
LP (long recording mode)	Approx. 106 hours	Approx. 4 hours about 2 Mbps
EP (extended mode)	Approx. 157 hours	Approx. 6 hours/ about 1.6 Mbps
	Approx. 208 hours	Approx. 8 hours/ about 1.2 Mbps
FR (Flexible Recording)	Approx. 29~157 hours	Approx. 1~6 hours



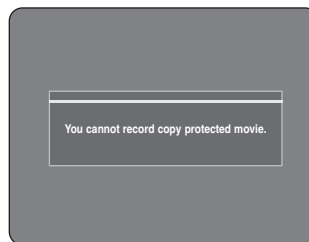
NOTE

- Recording time may vary according to specific conditions.

## Unrecordable video

Video with copy protection cannot be recorded on this HDD & DVD RECORDER.

When the HDD & DVD RECORDER receives a copy guard signal while recording, recording stops and the following message appears on the screen.



### Concerning Copy Control Signals

TV broadcasts that contain copy control signals may have one of the following three signal types, Copy-Free, Copy-Once and Copy-Never. If you want to record a copy-once type program, use DVD-RW with CPRM in VR Mode and DVD-RAM.

Media \ Signal type	Copy-Free	Copy-Once	Copy-Never
DVD-RW(Ver.1.1)	O	-	-
DVD-RW(Ver.1.1) with CPRM			
VR mode	O	O*	-
V mode	O		-
DVD-R	O		-
DVD-RAM(Ver.2.0)	O	O*	-

This \* marked parts are compatible with CPRM.

Once "Copy Once" has been recorded, recording cannot be done anymore.

#### - Content Protection for Recordable Media (CPRM)

CPRM is a mechanism that ties a recording to the media on which it is recorded. It is supported by some HDD & DVD RECORDERS, but not by many DVD players. Each blank recordable DVD has a unique 64-bit media ID etched in the BCA. When protected content is recorded onto the disc, it can be encrypted with a 56-bit C2 (Cryptomeria) cipher derived from the media ID.

During playback, the ID is read from the BCA and used to generate a key to decrypt the contents of the disc. If the contents of the disc are copied to other media, the ID will be absent or wrong and the data will not be decryptable.

## Recording the current TV program you are watching



Check that the disc has enough available space for the recording. Adjust the recording mode.

1

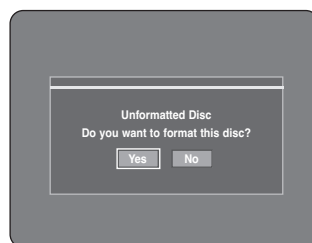
Press the **HDD** or **DVD** button.

If you select DVD, Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray.

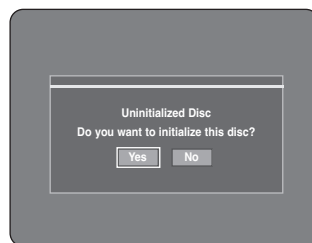
Press the **OPEN/CLOSE** button to close the disc tray.

Wait until **LOAD** disappears from the front panel display.

If an unused DVD-RAM disc is used, you will be prompted to format first. Make your selection using the **◀▶** buttons, then press **ENTER** button. (See page 75)



If an unused DVD-RW disc is used, whether to initialize or not will be asked first. Make your selection, then press the **ENTER** button. (See page 75)



2

Press the **CH** (◀ ▶) or number buttons to select the current program you want to record.

- 3** Press the **REC MODE** button repeatedly, (or press the **REC MODE** button and then press the **▲▼** buttons) to select the recording speed (quality).

→ SP → LP → EP → XP



- 4** Press the **REC** button. Information concerning the channel is displayed on the screen, then recording begins. Icon(○) is displayed on the front panel.



NOTE

- You cannot change the recording mode and the channel while recording.
- Recording will stop automatically if there is no free space left for recording.
- Up to 99 titles can be recorded onto a disc.(DVD-RAM/-RW/-R)
- Up to 999 titles can be registered on the HDD.
- HDD recording is available for up to 24 hours, and when recording for 24 hours, 4 titles will be recorded with each title has 6 hours in length.
- Recording will stop automatically if a copy protected image is selected.
- DVD-RAM/-RW discs must be formatted before starting to record. Most new discs are sold unformatted.
- Do not use DVD-R authoring discs with this unit.

#### - To pause recording -

- Press the **REC PAUSE** button to pause a recording in progress.
- Press the **REC PAUSE** button again during pause to resume recording.
- You can switch channels by pressing the **CH** (⊖ ⊕) buttons while recording pauses.

#### - To stop recording -

Press the **STOP** (⊙) button to stop or finish a recording in progress.

- When using DVD-RAM/-RW/-R discs, the message "Updating the information of disc. Please wait for a moment" is displayed.

# Recording from external equipment you are watching



## Before you start

Check that the disc has enough available space for the recording. Adjust the recording mode.

- 1 Press the **HDD** or **DVD** button.  
If you select DVD, Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray. Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display. If an unused DVD-RAM disc is used, whether to format or not will be asked first. (See page 75)  
If an unused DVD-RW disc is used, whether to initialize or not will be asked first. (See page 75)

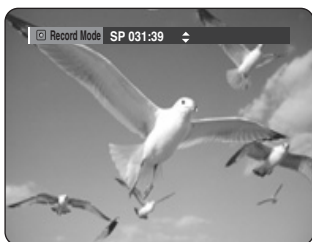
- 2 Press the **INPUT** button to select the input source according to the connection you made. The front panel display changes in the following sequence:

→ CH Number → AV 1 → AV 2 → DV

If you connect a digital camcorder, press the **INPUT** button to select **DV**. (See page 79)

- 3 Press the **REC MODE** button repeatedly, (or press the **REC MODE** button, then press the **▲▼** buttons) to select the recording speed (quality).

→ SP → LP → EP → XP



- 4 Press the **REC** button.  
Information concerning the external input mode is displayed on the screen, then recording begins. Icon ( ) is displayed on the front panel.

## - To pause recording -

- Press the **REC PAUSE** button to pause a recording in progress.
- Press the **REC PAUSE** button again during pause to resume recording.
- You can switch channels by pressing the **CH** ( ) buttons while recording pauses.

## - To stop recording -

Press the **STOP** ( ) button to stop or finish a recording in progress.

- When using DVD-RAM/-RW/-R discs, the message "Updating the information of disc. Please wait for a moment" is displayed.

# Copying from a Camcorder

You may control the Camcorder using the IEEE1394 (DV) interface.

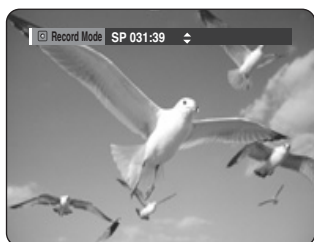


**1** Connect the DV output jack of your camcorder to the DV input jack on the front of your HDD & DVD RECORDER using a DV cable.

**2** Press the **HDD** or **DVD** button.  
If you select DVD, Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray. Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display.

**3** Press the **REC MODE** button repeatedly to select the recording speed(quality).

→ SP → LP → EP → XP



**4** Press the **INPUT** button to select **DV**.  
If the input is set to DV, a playback/record menu that enables camcorder control appears on the top of the screen.



**5** Select the Play (▶) icon on the upper part of the screen to playback the camcorder and find the starting position to copy.  
You can press the **PLAY** (⏮) button of the remote control to play the camcorder.

**6** To start recording, use the ◀▶ buttons to select Record (●) icon in the top side of the screen, then press the **ENTER** button.  
You can press the **REC** button of the remote control to start recording. To display playback related icons on the screen, press any direction button on the remote control.

## - To stop recording -

Press the **STOP** (⏹) button to stop or finish a recording in progress.

- When using DVD-RAM/-RW/-R discs, the message "Updating the information of disc. Please wait for a moment" is displayed

# Making an One Touch Recording (OTR)

You can set the HDD & DVD RECORDER to record in 30-minute increments up to 8 hours by pressing the **REC** button.



**1** Press the **HDD** or **DVD** button.  
If you select DVD, Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray. Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display.

**2** If you want to record a TV channel, press the **CH** (☺☺) buttons or number buttons to select a desired channel. If you want to record through a connected external component, press the **INPUT** button to select an appropriate external input (AV 1, AV 2, DV or CH 01).

**3** Press the **REC** button to start recording.



**4** Press the **REC** button repeatedly to adjust the desired recording time.

→ 0:30 → 1:00 → ... 8:00 → Off



- The timer counter decreases by the minute from 8:00 to 0:00, then the HDD & DVD RECORDER stops recording.

## - To stop recording -

Press the **STOP** (⊙) button. The message "Do you want to stop recording?" is displayed.

- Press the ◀▶ buttons to select **Yes**, then press the **ENTER** button.
- Or press the **STOP** (⊙) button again.

## About INFO button

During recording, press the **INFO** button once, the system information screen appears.: Displays Active Status, Background Status, and Main Screen information.

HDD	System Info
Active status	Record XP
Background Status	--
Screen	Recording:CH11 [SAP]
JAN/01/2005 (SAT)	AM 12:00

Pressing the **INFO** button twice, Disc information screen appears.: Displays Total numbers of Titles and Playlists, Recordable Time(Title), Available Space(Music/Photo).

HDD	Disc Info
Total Title	15
Total Playlist	2
Recordable Time : Title	17:12 XP
Available Space:Music/Photo	10033 MB
JAN/01/2005 (SAT)	AM 12:00

Pressing the **INFO** button three times: Current recording information screen appears.: Displays information of recording Name, Title, Created Time and Recording Time.

HDD	Recording Info
Name	JAN/01/2005 12:00 AM
	CH 11
Recording Title	4
Created Time	JAN/01/2005 12:00 AM
Recording Time	00:13:27
JAN/01/2005 (SAT)	AM 12:00



# Chasing Play

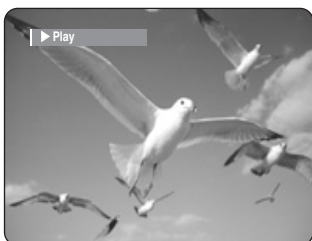


You can play back from the beginning of the program you are recording.



## While Recording

- 1 Press the **PLAY** (⏮) button.  
It plays back the title that you are currently recording from the beginning.  
Playback is not available for 10 seconds from the start of recording.  
You can use the **SKIP** (⏮) (⏭) and other playback-related buttons to view the previous recorded list.



- 2 Press the **ENTER** or **PLAY** (⏮) button.  
It plays back the title that you are currently recording from the beginning.



## - Stopping Playback / Recording -

- 1 Press the **STOP** (⏻) button. Playback screen disappears and the recording in progress screen appears.
- 2 Pressing the **STOP** (⏻) button once more will stop the recording.



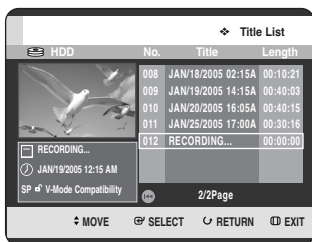
NOTE

- No sound is heard during search mode.
- DVD disc playback is available during HDD recording. However, JPEG and MP3 files in the disc cannot be played back.
- HDD playback is available during DVD recording. However, JPEG and MP3 files in the HDD cannot be played back.



## Using the TITLE LIST button

- 1 With the unit in recording mode, press the **TITLE LIST** button.  
The Title List screen is displayed.  
Press the **▲▼/SKIP** (⏮) (⏭) buttons to select the recording title list.



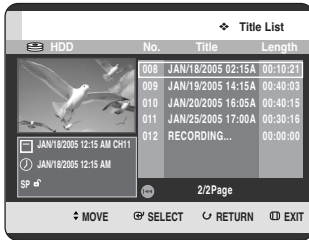
# Simultaneous Recording and Playback

You can watch the previous title list while recording a program.



## Using the TITLE LIST button

- 1 With the unit in recording mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



- 2 Press the **▲▼/ SKIP** (⏮⏭) buttons to select the title, then press the **ENTER** or **PLAY** (⏪) button. Selected title list will be played back.



## - Stopping Playback / Recording -

- 1 Press the **STOP** (⏻) button. Playback screen disappears and the recording in progress screen appears.
- 2 Pressing the **STOP** (⏻) button once more will stop the recording.



NOTE

- No sound is heard during search mode.
- This function is not available while timer recording is active.

# Making a Timer Recording

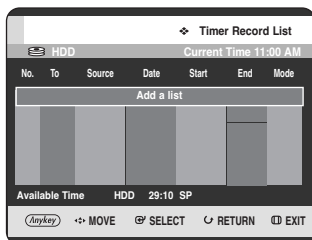


1. Check the antenna cable is connected.
  2. Check the remaining time of the disc.
  3. Check the date and time are correct.
- Make sure the Clock (Setup-Clock Set) must be set before you proceed with a timer recording. (See pages 27~29)



## Using the TIMER button

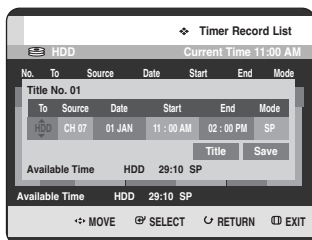
- 1 With the unit in Stop mode/Playback mode, press the **TIMER** button.  
The **Timer Record List** screen is displayed.



## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Timer Record**, then press the **ENTER** or **▶** button.

- 2 Press the **ENTER** button to select **Add a list**.  
The Timer Record List screen is displayed.



## Using the ANYKEY button.

- Press the **ANYKEY** button.
- Press the **▲▼** buttons to select **Add**, then press the **ENTER** or **▶** button.

## 3

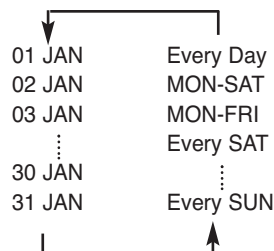
Set timer recording option.

- Fill the input items using the **▲▼◀▶** buttons and number buttons.

**◀▶** : Moves to the previous/next item.

**▲▼ 0~9** : Sets a value.

- **To** : Select the media to record HDD or DVD.
- **Source** : The video input source (AV1, AV2), or the broadcasting channel you want to make a timer recording from.
- **Date** : Timer Recording allows setting the recording time within one month period. Set the recording day. (day/month)



- **Start/End Time** : Start and end time of the timer recording.

## • Mode (Recording Mode) :

- **FR (Flexible Recording)** : Select when you want to set video quality automatically. In FR mode, the most suitable record mode is adjusted automatically, according to remaining time on the disc and length of the timer recording. This function is selected only one mode in XP, SP, LP and EP modes.
- **XP (high quality)** : Select when video quality is important.
- **SP (standard quality)** : Select to record in standard quality.
- **LP (low quality)** : Select when a long recording time is required.
- **EP (extended)** : Select when a longer recording time is required.



NOTE

- When you are recording at EP mode on a DVD-RW(V mode)/-R disc, it may not record the full 6 or 8 hours because the unit uses the VBR(Variable Bit Rate) ENCODING system. For example, if you record a program with a lot of action, it uses a higher bit rate which in turn consumes more disc memory.

- **TITLE** : To label the title name, select the title and then press the **ENTER** button. Title renaming screen appears. See page 91 for the registration.

**4** After selecting the set up value for each mode, press the **ENTER** button to select **Save**, and press the **ENTER** button again.

-  will appear on the front panel. It means that a timer recording is registered.

**If the timer settings overlap;**

The programs are recorded in order of priority. If timer recording is set for the first program and then again for the second program and both programs overlap, the following message will appear on the screen: "This setting is identical with 1." The message shows that the first program has priority. After recording of the first program is complete, the second program starts being recorded.

**To exit without saving the current setting**

Press the **MENU** button.

**To return to the previous menu**


Press the **RETURN** button if you don't want to set a timer recording.

**5** When you want to recording on DVD-RAM/-RW/-R, you must insert the disc.

**6** Press the **MENU** button to finish the Timer Recording setting.



NOTE

- The timer recording time may differ from the set time depending on disc status and overall timer recording status (for example, recording times overlapping, or when the previous recording ends within 2 minutes before the start time of the next recording.)
- You can make the Timer Recording up to 12 programs.
- If HDD disk has no available recording space,  blinks. It means that HDD disk has no space to record.

## Flexible Recording (for Timer recording only)



In FR mode, the most suitable record mode is adjusted automatically, according to remaining time on the disc and length of the timer recording. This function is selected only one mode in XP, SP, LP and EP modes and you can use this mode for timer recording.

The FR mode recording setup is the same as Timer Recording. When setting the mode in step 4, set the FR mode.

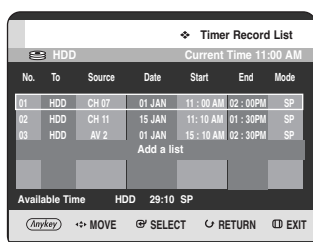
# Editing the Timer Record List

Follow these directions to edit the timer record list.



## Using the TIMER button

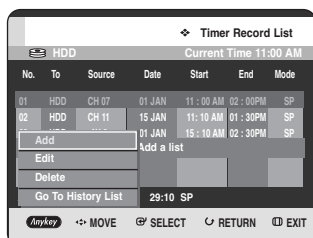
- 1 With the unit in Stop mode/Playback mode, press the **TIMER** button.  
The Timer Record List screen is displayed.



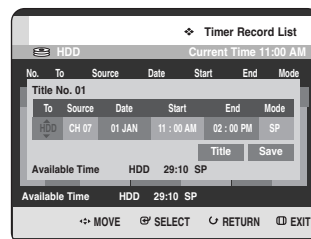
## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Timer Record**, then press the **ENTER** or **▶** button.

- 2 Press the **▲▼** buttons to select the number of the Timer Record List you want to edit, then press the **ANYKEY** button.
  - The **Add**, **Edit**, **Delete** and **Go To History List** items are displayed.



- 3 Press the **▲▼** buttons to select **Edit**, then press the **ENTER** or **▶** button.
  - The Timer Record Input item is displayed.  
Edit the items you want to modify. See the "Making a Timer Recording" section for more information on Timer Recording Input items. (See page 83)



- 4 Press the **ENTER** button to select **Save**, then press the **ENTER** button to confirm the edited setting.
- 5 Press the **MENU** button after finishing the operation.  
The Timer Record List screen will disappear.

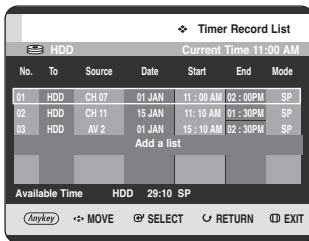
# Deleting a Timer Record List

Follow these directions to delete an entry from the timer record list.



## Using the TIMER button

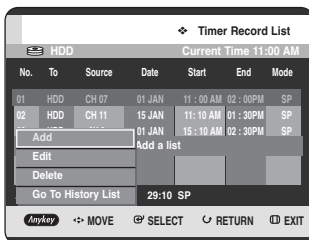
- With the unit in Stop mode/Playback mode, press the **TIMER** button. The Timer Record List screen is displayed.



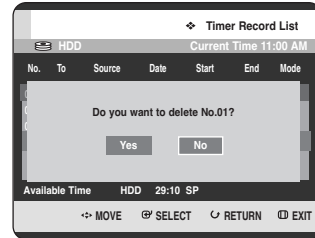
## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Timer Record**, then press the **ENTER** or **▶** button.

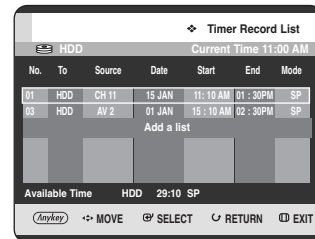
- Press the **▲▼** buttons to select the number of the Timer Record List you want to delete, and then press the **ANYKEY** button.
  - The **Add**, **Edit**, **Delete** and **Go To History List** items are displayed.



- Press the **▲▼** buttons to select **Delete**, then press the **ENTER** or **▶** button.
  - You will be prompted with the delete confirm message such as "Do you want to delete No.01?".



- Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button.
  - The selected entry will be deleted from the list.



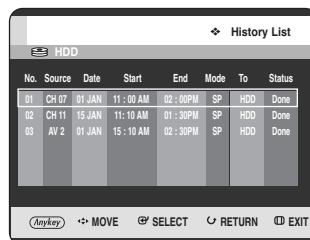
- Press the **MENU** button after finishing the operation. The Timer Record List screen will disappear.

## Go To History List

You can confirm the performance results of title lists that have passed the reserved recording time.

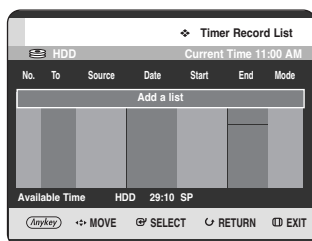


- 3 Press the **▲▼** buttons to select **Go To History List**, then press the **ENTER** or **▶** button. The History List screen is displayed.



### Using the TIMER button

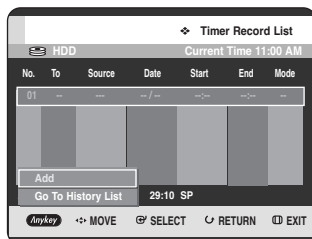
- 1 With the unit in Stop mode/Playback mode, press the **TIMER** button. The Timer Record List screen is displayed.



### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Timer Record**, then press the **ENTER** or **▶** button.

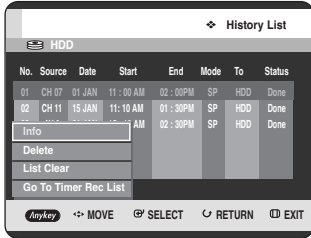
- 2 Press the **ANYKEY** button.
  - The **Add** and **Go To History List** items are displayed.



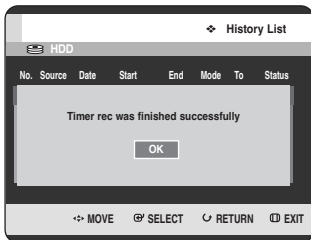
## Information about History List

Informs whether the selected History List performed a Timer Recording successfully.

- 3**-1 Press the ▲▼ buttons to select the number of the History List, then press the **ANYKEY** button.



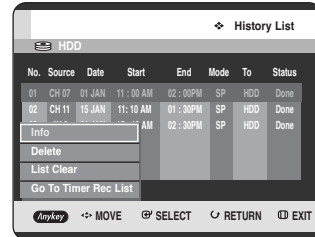
- 4** Press the ▲▼ buttons to select **Info**, then press the **ENTER** or **▶** button.



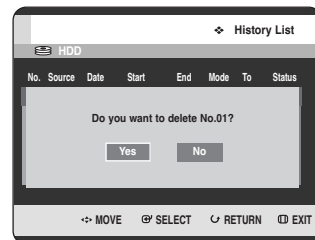
## Delete History List

Deletes a History List individually.

- 3**-1 Press the ▲▼ buttons to select the number of the history list you want to delete, and then press the **ANYKEY** button.



- 4** Press the ▲▼ buttons to select **Delete**, then press the **ENTER** or **▶** button.

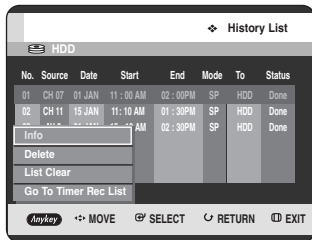




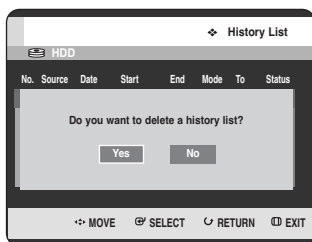
# Clear History List

Clears all History Lists at once.

3-1 Press the **ANYKEY** button.



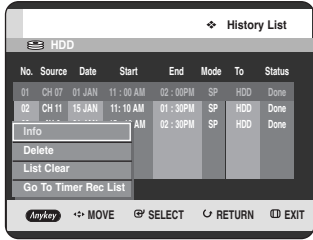
4 Press the **▲▼** buttons to select **List Clear**, then press the **ENTER** or **▶** button.



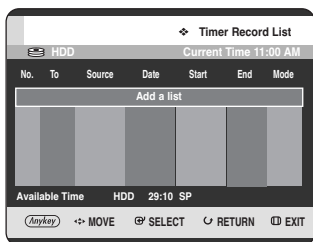
# Go To Timer Rec List

Switches directly from the History List to the Timer Rec List.

3-1 Press the **ANYKEY** button.



4 Press the **▲▼** buttons to select **Go To Timer Rec List**, then press the **ENTER** or **▶** button.





# Editing

This section introduces basic functions of editing and explains both edit functions for the recording on a disc and edit functions for the entire disc.

Basic Editing (Title List) .....	91
Advanced Editing (Playlist) .....	98
Copying from HDD to DVD .....	106
Copying Multiple Titles at One Time .....	109
Copying from DVD to HDD .....	113
Copying MP3 or JPEG Files from a Disc to HDD ...	114
Disc Manager .....	116

## • Title List

A title is a section of recorded video and audio.

Title List shows a list to help you select a title.

Since the title consists of the information on stream that is actually recorded, if one title is deleted, that title cannot be played again.

## • Play List

This refers to a unit of playback, which is made by selecting a desired scene in the entire Title List.

When one playlist is played, only the scene selected by the user will play and then stop. Since only the information necessary for playing a desired scene is included in a playlist, even if that playlist is deleted, the original stream will not be deleted.

**Recording or editing might not be completed if an error, such as a sudden power failure occurs. Please be aware that a material that has been damaged is unable to be retrieved to its original content.**

# Basic Editing (Title List)

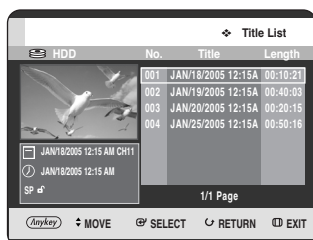
## Renaming(Labeling) a Title

Follow these instructions to rename a title list entry, i.e., to edit the title of a recorded program.



### Using the TITLE LIST button

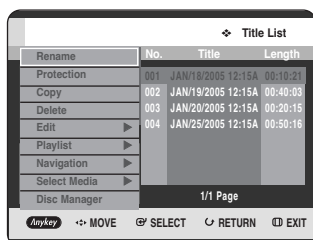
- With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



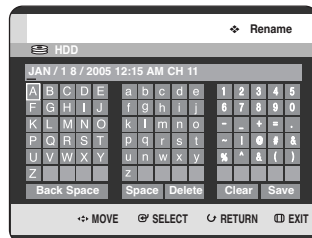
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

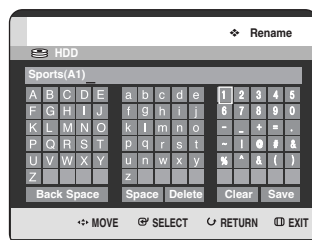
- Press the **▲▼** buttons to select an entry you want to rename from the Title List, then press the **ANYKEY** button.



- Press the **▲▼** buttons to select **Rename**, then press the **ENTER** or **▶** button.  
The Rename screen is displayed.

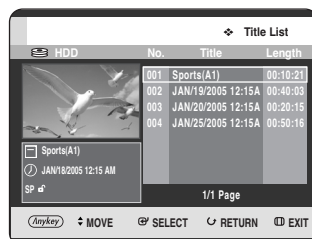


- Select the desired characters using the **▲▼◀▶** buttons, press the **ENTER** button.



- Back Space:** Deletes and moves the cursor backwards by one position. (Equivalent to the **CANCEL** button)
- Space:** Enters a blank and moves the cursor one forward (to the right).
- Delete:** Deletes the character at the cursor position.
- Clear:** Deletes all the character inputs.
- Save:** Registers the character inputs.

- Press the **▲▼◀▶** buttons to select **Save**, and then press the **ENTER** button.  
The changed title name is displayed on the title item of the selected entry.



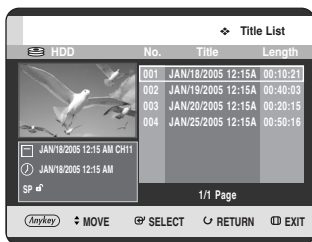
## Locking (Protecting) a Title

Follow these instructions to lock an entry to protect it from accidental deletion.



### Using the TITLE LIST button

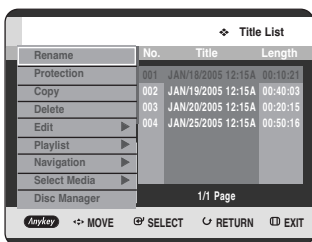
- With the unit in Stop mode/Playback mode, press the **TITLE LIST** button .  
The Title List screen is displayed.



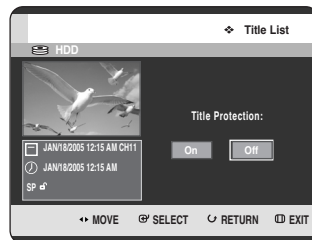
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

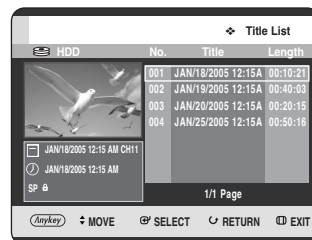
- Press the **▲▼** buttons to select an entry you want to protect from the Title List, then press the **ANYKEY** button.



- Press the **▲▼** buttons to select **Protection**, then press the **ENTER** or **▶** button.



- Press the **◀▶** buttons to select **On**, then press the **ENTER** button. The key icon on the information window for the selected entry changes to the locked status. (🔒 → 🔒)



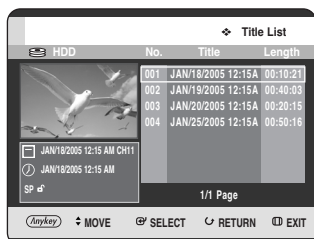
## I Deleting a Title

Follow these instructions to delete an entry from the Title List.



### Using the TITLE LIST button

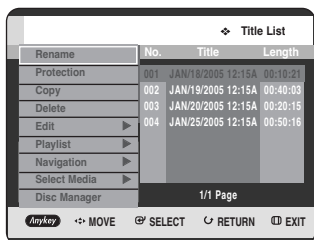
- 1 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



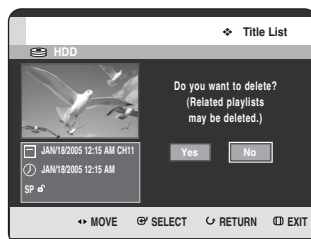
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

- 2 Press the **▲▼** buttons to select an entry you want to delete in the Title List, then press the **ANYKEY** button.

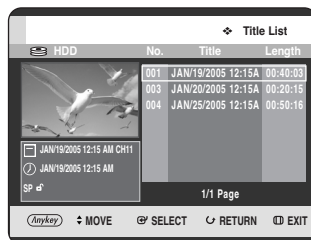
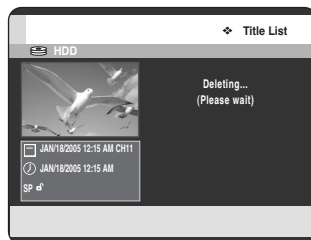


- 3 Press the **▲▼** buttons to select **Delete**, then press the **ENTER** or **▶** button.



- The message may be different depend on the type of disc. You will be prompted with the confirmation message. HDD, DVD-RAM(VR mode), DVD-RW(VR mode): Since Playlist is present, the message "Do you want to delete? (Related playlists may be deleted.)" is displayed. DVD-RW(Video mode)/-R: Since Playlist is not present, the message "Do you want to delete?" is displayed.

- 4 Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button.





NOTE

- You cannot delete a protected entry. If you want to delete a protected entry, select "Off" in the Title Protection menu. (See page 92)
- When the Disc Protection has been set to Protected, you cannot delete titles. (See page 117)
- Once an entry is deleted from the Title List it cannot be recovered.
- Once DVD-RW/-R is finalized, it cannot be deleted.

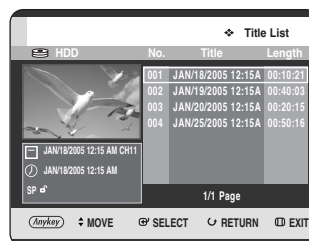
## Splitting a Section of a Title (Split)

Follow these instructions to split a section of a Title List entry.



### Using the TITLE LIST button

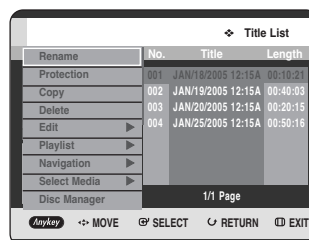
- 1 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



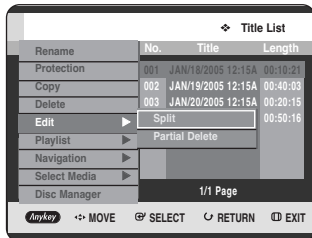
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **►** button.

- 2 Press the **▲▼** buttons to select an entry you want to Split from the Title List, then press the **ANYKEY** button.



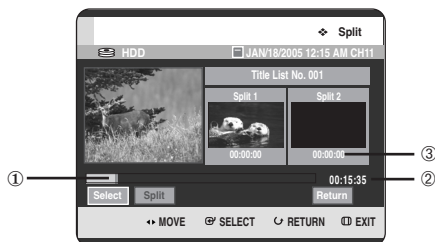
- 3** Press the **▲▼** buttons to select **Edit**, then press the **ENTER** or **▶** button.



- 4** Press the **▲▼** buttons to select **Split**, then press the **ENTER** or **▶** button.



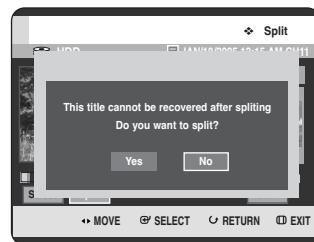
- 5** Using the playback-related buttons (**PLAY**(⏮), **SEARCH** (⏮⏭)), move to a point for splitting and press the **ENTER** button. If it is not the point where you want to split, press the **RETURN** button to cancel the selection. Using the playback-related buttons, move to a point to split and press the **ENTER** button.



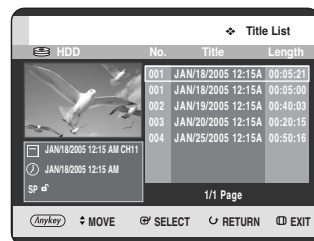
- ① First split interval  
② Total recording time of title list  
③ Start time of the second split and its screen



- 6** Press the **ENTER** button to select **Split**. The message "This title cannot be recovered after splitting. Do you want to split?" is displayed.



- 7** Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The split title is divided into two, and next titles will be pushed back one by one.



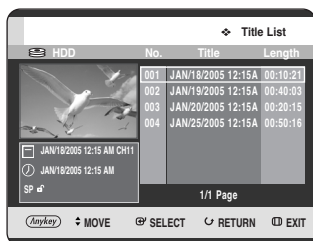
## Deleting a Section of a Title (Partial Delete)

Follow these instructions to delete a section of a Title List entry.



### Using the TITLE LIST button

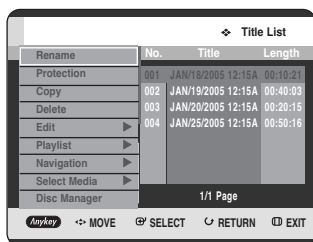
- With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



### Using the MENU button.

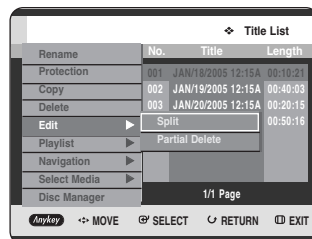
- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.

- Press the **▲▼** buttons to select an entry you want to edit from the Title List, then press the **ANYKEY** button.

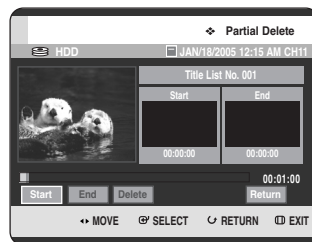


- When using DVD-RAM/-RW(VR) disc, you can select Partial Delete directly by pressing the **ANYKEY** button.  
(Then go to step 5)

- Press the **▲▼** buttons to select **Edit**, then press the **ENTER** or **▶** button.



- Press the **▲▼** buttons to select **Partial Delete**, then press the **ENTER** or **▶** button.



- Press the **ENTER** button at the starting point.  
The image and starting point time are displayed in the section deletion starting point window.



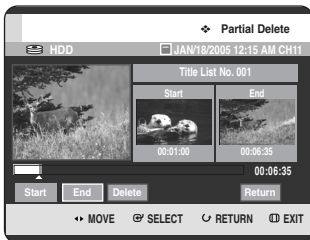


## Edit Title List Screen Elements

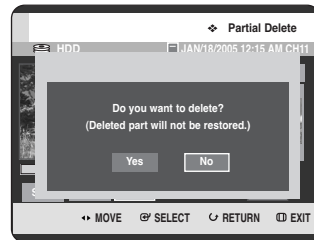
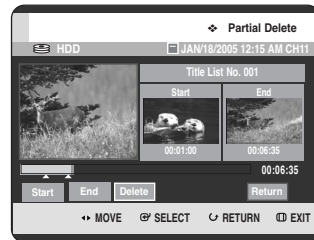


- ① Playback bar
- ② Playtime
- ③ Section deletion starting point window and time
- ④ Section deletion end point window and time
  - Select the start and end points of the section you want to delete using the playback related buttons.
  - Playback related buttons :  
(PLAY(⏮), SEARCH(⏮⏮), SEARCH(⏭⏭))

- 6 Press the **ENTER** button at the end point. The image and end point time are displayed in the Section deletion ending point window.



- 7 Press the ◀▶ buttons to select **Delete**, then press the **ENTER** button.



- 8 Press the ◀▶ buttons to select **Yes**, then press the **ENTER** button. The selected section has been deleted.

- 9 Press the ◀▶ buttons to select **Return**, then press the **ENTER** button to finish the operation.



- The length of the section to be deleted must be at least 5 seconds long.
- If the length of the section to be deleted is less than 5 seconds, you will be prompted with the message "The range is too short."
- If the end time precedes the starting time, you will be prompted with the message "End point cannot be marked earlier than start point".
- The section cannot be deleted when it includes a still picture.
- Press the **MENU** button after the operation has finished. The Title List screen will disappear.

# Advanced Editing (Playlist)

## Creating a Playlist

Follow these instructions to create a new playlist entry from a recorded title.



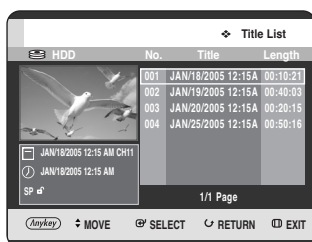
(VR mode)



## Using the TITLE LIST button

- With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.

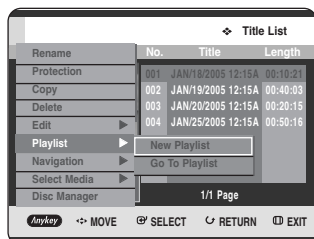
The Title List screen is displayed.



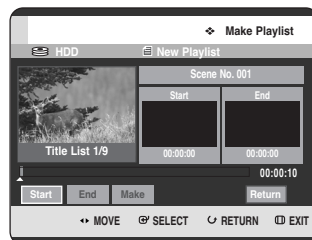
## Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the  $\blacktriangle/\blacktriangledown$  buttons to select **Title**, then press the **ENTER** or  $\blacktriangleright$  button.

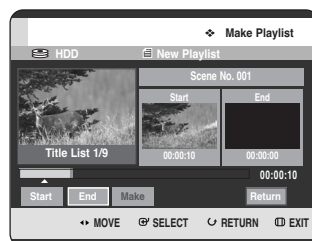
- Press the **ANYKEY** button.  
Press the  $\blacktriangle/\blacktriangledown$  buttons to select **Playlist**, then press the **ENTER** or  $\blacktriangleright$  button.



- Press the  $\blacktriangle/\blacktriangledown$  buttons to select **New Playlist**, then press the **ENTER** or  $\blacktriangleright$  button.  
The Make Playlist screen is displayed.

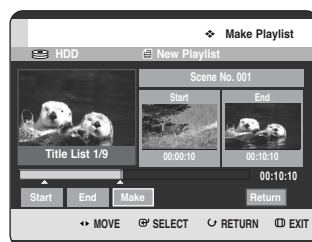


- Press the **ENTER** button at the start point.



- The image and time at the start point are displayed on the Start window.
- The yellow-colored selection bar moves to the End item.
- Select the starting point of the section from which you want to create a new scene using the playback related buttons (**PLAY**( $\odot$ ), **SEARCH**( $\odot$ )).

- Press the **ENTER** button at the end point.



- The image and end point time are displayed in the End window.
- The yellow-colored selection bar moves to the Make item.

- 
- 6** Press the ◀▶ buttons to select **Make**, then press the **ENTER** button.
- To make a scene for playlist.  
A new Make scene screen is displayed.  
Repeat steps 3~6 to make scene of playlist.  
New scene will be added to the current playlist.  
You can check and see all the scenes on Edit playlist screen. (See page 101)
  - To make a new playlist.  
Repeat steps 1~6 if you want to make a new playlist.
- 

- 7** Press the ◀▶ button to select **Return**, then press the **ENTER** button for finishing the operation.
- 



NOTE

- You can create up to 99 playlist entries.
  - Depending on the kind of disc, the displayed screen may have a slight difference.
  - Pressing the **SKIP** button will skip to the next title.
- 

## Playing Entries in the Playlist

Follow these instructions to play the playlist entries.

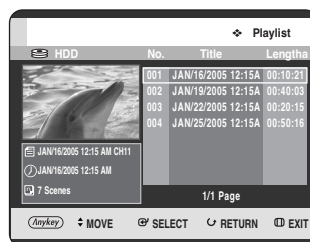


(VR mode)



### Using the PLAY LIST button

- 
- 1** With the unit in Stop mode/Playback mode, press the **PLAY LIST** button.  
The Playlist screen is displayed.



### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
  - Press the ▲▼ buttons to select **Title**, then press the **ENTER** or ▶ button.  
The Title List screen is displayed.
  - Press the **ANYKEY** button.
  - Press the ▲▼ buttons to select **Playlist**, then press the **ENTER** or ▶ button.
  - Press the ▲▼ buttons to select **Go To Playlist**, then press the **ENTER** or ▶ button.
- 

- 2** Press the ▲▼ buttons to select the playlist you want to play, then press the **ENTER** or **PLAY** (⏮) button.
- 

- 3** Press the **STOP** (⏮) button to stop playing.  
The screen returns to the Playlist screen.
-

## Renaming a Playlist Entry

Follow these instructions to rename a playlist entry, i.e. to edit the title of a playlist entry.

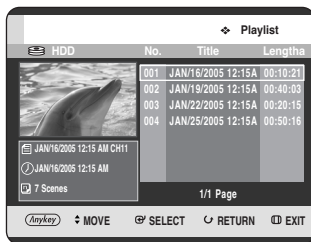


(VR mode)



### Using the PLAY LIST button

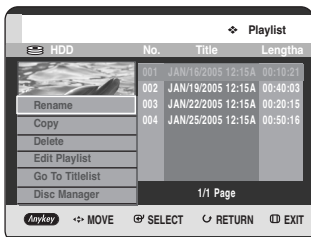
- With the unit in Stop mode/Playback mode, press the **PLAY LIST** button.  
The Edit Playlist screen is displayed.



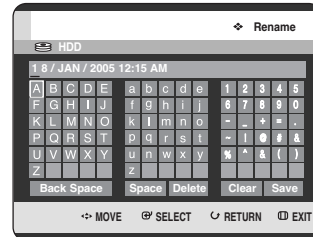
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.
- Press the **ANYKEY** button.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Go To Playlist**, then press the **ENTER** or **▶** button.

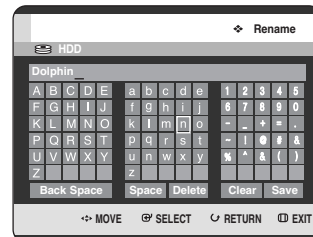
- Press the **▲▼** buttons to select the title you want to Rename from the Playlist, then press the **ANYKEY** button.  
ANYKEY menu is displayed : **Rename**, **Copy**, **Delete**, **Edit Playlist**, **Go To Titlelist**, **Disc Manager**



- Press the **▲▼** buttons to select **Rename**, then press the **ENTER** or **▶** button.  
The Rename screen is displayed.

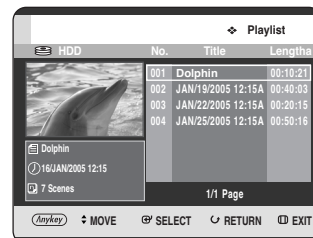


- Select the desired characters using the **▲▼◀▶** buttons, then press the **ENTER** button.



- This function is the same as the Rename function in the renaming the title. (See page 91)
- The maximum number of characters that can be entered is 31. All 31 characters can be displayed by pressing the **INFO** button.

- Press the **▲▼◀▶** buttons to select **Save**, then press the **ENTER** button.  
The changed title is displayed in the title field of the selected playlist entry.



## Editing a Scene for the Playlist

Follow these instructions to edit scenes for a playlist.

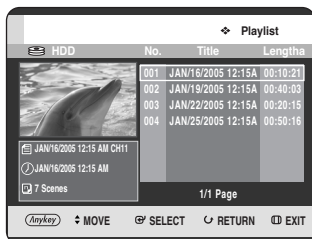


(VR mode)



### Using the PLAY LIST button

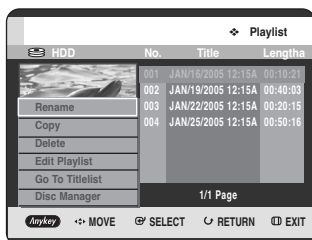
- With the unit in Stop mode/Playback mode, press the **PLAY LIST** button.  
The Edit Playlist screen is displayed.



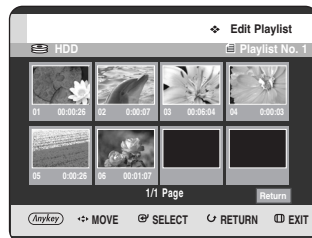
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.
- Press the **ANYKEY** button.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Go To Playlist**, then press the **ENTER** or **▶** button.

- Press the **▲▼** buttons to select the title you want to edit from the Playlist, then press the **ANYKEY** button.  
The Edit Playlist menu is displayed: **Rename**, **Copy**, **Delete**, **Edit Playlist**, **Go To Titlelist**, **Disc Manager**.

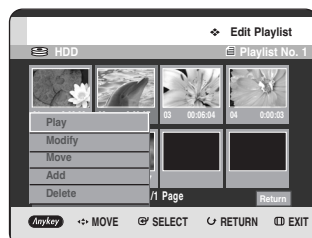


- Press the **▲▼** buttons to select **Edit Playlist**, then press the **ENTER** or **▶** button.  
The Edit Playlist Scene screen is displayed.

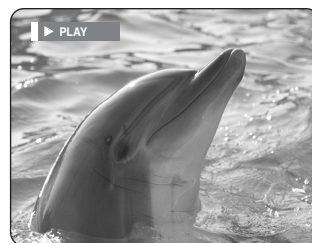


### Playing a Selected Scene

- Press the **▲▼◀▶** buttons to select the scene you want to play, then press the **ANYKEY** button.  
The playlist entry to be played is selected.



- Press the **▲▼** buttons to select **Play**, then press the **ENTER** or **▶** button.  
The selected scene is played.

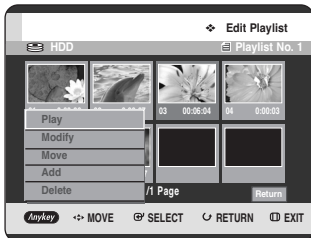


- To stop scene play, press the **STOP** (⏻) button.

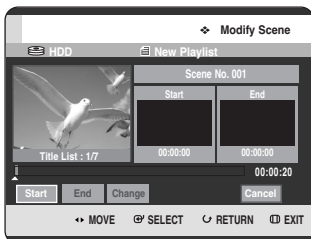
## Modifying a Scene (Replacing a Scene)

To setup, follow steps 1 to 3 in page 101.

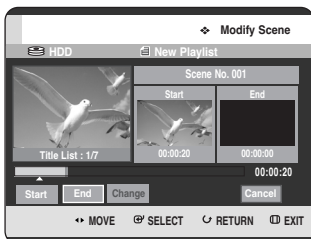
- 4 Press the **▲▼◀▶** buttons to select the scene you want to modify, then press the **ANYKEY** button.



- 5 Press the **▲▼** buttons to select **Modify**, then press the **ENTER** or **▶** button.  
The Modify Scene screen is displayed.

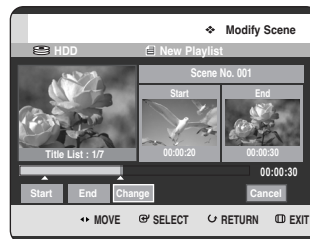


- 6 Press the **ENTER** button at the start point of the scene.



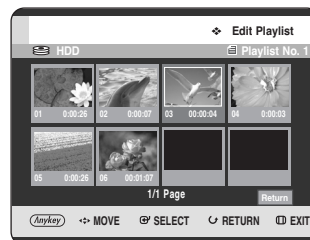
- The image and starting point time are displayed on the Start window.
- Select the starting or ending point of the section you want to modify using the playback related buttons (**PLAY**(◀▶), **SEARCH**(◀▶)).

- 7 Press the **ENTER** button at the end point of the scene.



- The image and ending point time are displayed in the End window.

- 8 Press the **◀▶** buttons to select **Change**, then press the **ENTER** button.

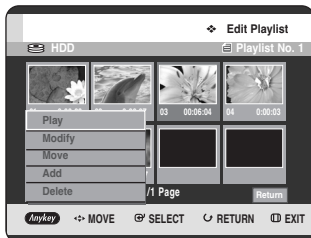


- The scene you want to modify is changed with the selected section.

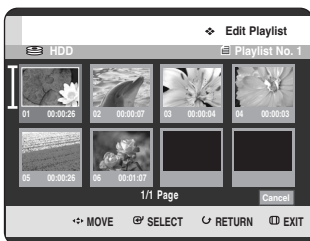
## Moving a Scene (Changing the Position of a Scene)

To setup, follow steps 1 to 3 in page 101.

- 4** Press the **▲▼◀▶** buttons to select the scene you want to move (change the position), then press the **ANYKEY** button.

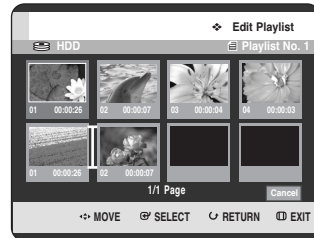


- 5** Press the **▲▼** buttons to select **Move**, then press the **ENTER** or **▶** button.

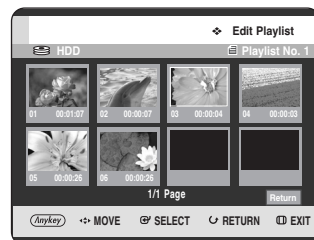


- A yellow selection window is displayed on the scene to be moved.

- 6** Press the **▲▼◀▶** buttons to select the position to which you want to move the selected scene, then select the **ENTER** button.



- The selected scene is moved to the selected position.



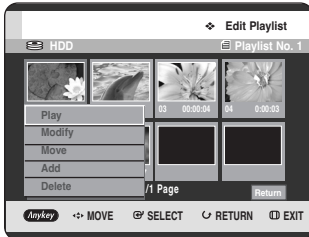
NOTE

- You cannot move the selected scene to the position of the next scene, because the selected scene should be inserted before that position, which requires no action.
- Depending on the kind of disc, the displayed screen may have a slight difference.

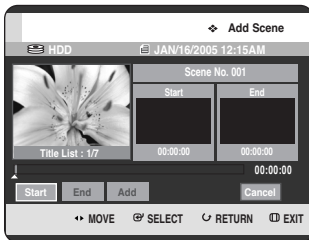
## Adding a Scene

To setup, follow steps 1 to 3 in page 101.

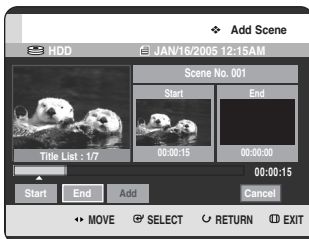
- 4** Press the **▲▼◀▶** buttons to select the scene that will have a new scene inserted before it, then press the **ANYKEY** button.



- 5** Press the **▲▼** buttons to select **Add**, then press the **ENTER** or **▶** button.  
The Add Scene screen is displayed.

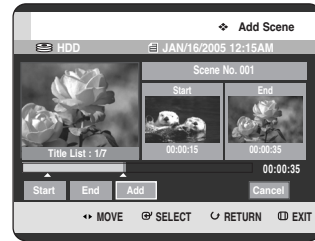


- 6** Press the **ENTER** button at the starting point of the scene.



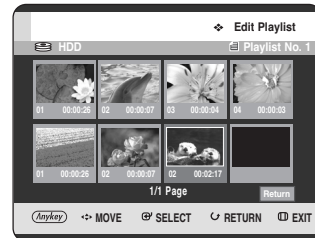
- The image and starting point time are displayed on the Start window.
- Select the starting or ending point of the section you want to modify using the playback related buttons (**PLAY**(▶), **SKIP**(⏮️⏭️)).

- 7** Press the **ENTER** button at the end point of the scene.



- The image and time of the end point are displayed in the End window.
- To cancel, press the **◀▶** buttons to select **Cancel**, then press the **ENTER** button.

- 8** Press the **◀▶** buttons to select **Add**, then press the **ENTER** button.



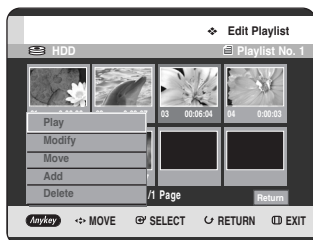
- The section you want to add is inserted prior to the scene selected in step 4 of Adding a Scene on the previous page.



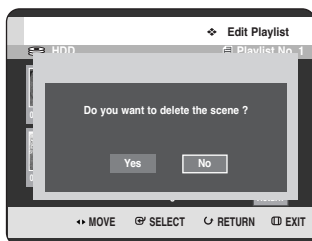
## Deleting a Scene

To setup, follow steps 1 to 3 in page 101.

- 4** Press the **▲▼◀▶** buttons to select the scene you want to delete, then press the **ANYKEY** button.



- 5** Press the **▲▼** buttons to select **Delete**, then press the **ENTER** or **▶** button.



- The message "Do you want to delete the scene ?" is displayed.

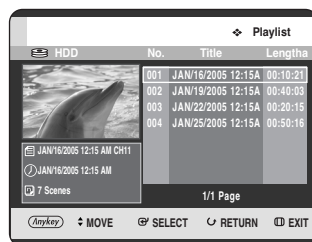
- 6** Press the **◀▶** buttons to select **Yes**, then press the **ENTER** to delete the selected scene.

## Deleting a Playlist Entry from the Playlist



### Using the PLAY LIST button

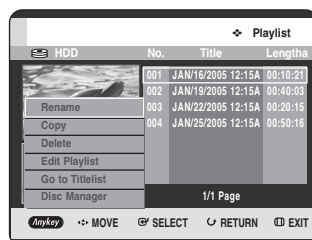
- 1** With the unit in Stop mode/Playback mode, press the **PLAY LIST** button.  
The Edit Playlist screen is displayed.



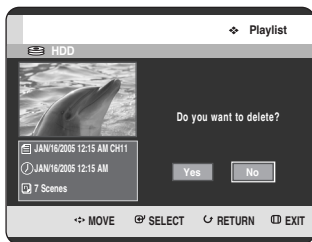
### Using the MENU button.

- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.
- Press the **ANYKEY** button.
- Press the **▲▼** buttons to select **Playlist**, then press the **ENTER** or **▶** button.
- Press the **▲▼** buttons to select **Go To Playlist**, then press the **ENTER** or **▶** button.

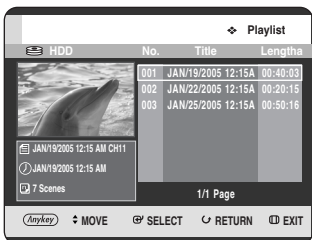
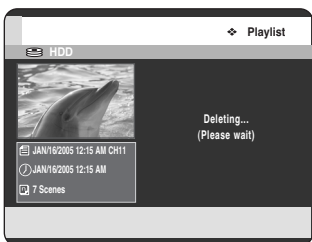
- 2** Press the **▲▼** buttons to select the title you want to edit from the Playlist, then press the **ANYKEY** button.  
The Edit Playlist menu is displayed: **Rename**, **Copy**, **Delete**, **Edit Playlist**, **Go To Titlelist**, **Disc Manager**.



- 3** Press the **▲▼** buttons to select **Delete**, then press the **ENTER** or **▶** button.
- You will be prompted with the delete confirmation message "Do you want to delete?".

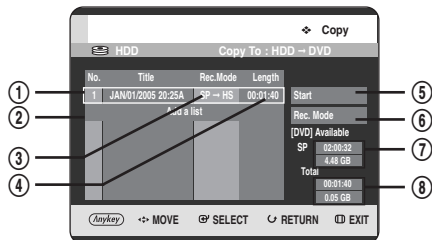


- 4** Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button.
- You automatically returned to the Playlist screen after the delete operation has finished.



## Copying from HDD to DVD

### About the Copy Screen



- ① Title to be copied
- ② Add titles to be copied (up to 7 titles can be copied at one time)
- ③ Recording mode for copying
  - HS(high speed): you can copy more quickly than normal playback speed.
  - Copies in the same record mode as source title.
  - XP/SP/LP/EP : you can not use high speed copy.
- ④ Record time of title to be copied
- ⑤ Copy start button
- ⑥ Record mode setup button
- ⑦ Remaining time and space on the current disc in DVD Record mode
- ⑧ Total record time and space of selected titles for copying

### Contents Copy Specifications

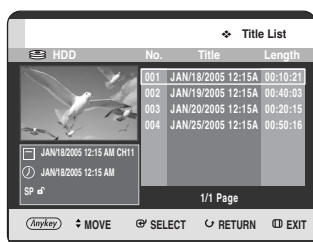
Contents	HDD → DVD
Recorded Video Title	Supported
Copy Protected Title	Not supported
Copy Once Title	Move (Deletes the Title in the HDD after copying)

Once "Copy Once program" has been recorded on the DVD disc, this title cannot be copied to HDD anymore. But "Copy Once program" has been recorded on the HDD, this title can be copied to DVD-RW(VR mode) or DVD-RAM.



## Using the TITLE LIST button

- 1 Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray.
- 2 Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display. Check that the disc has enough available space for the recording.
- 3 Select the HDD by pressing the **HDD** button on the front panel of the HDD & DVD RECORDER or on the remote control.
- 4 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.

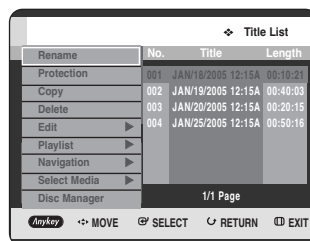


### Using the MENU button.

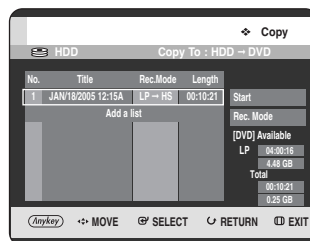
- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.

- 5 Press the **▲▼** buttons to select the title you want to copy.  
To move to other pages, press the **SKIP** (**◀▶**) buttons.  
**SKIP** (**◀**) : previous page of title list  
**SKIP** (**▶**) : next page of title list

- 6 Press the **ANYKEY** button.

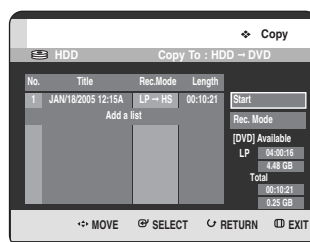


- 7 Press the **▲▼** buttons to select **Copy**, then press the **ENTER** or **▶** button.  
The Copy screen is displayed.



- If you want to change the record mode when copying, see page 112.

- 8 Press the **ENTER** or **▶** button to select **Start**, then press the **ENTER** button.



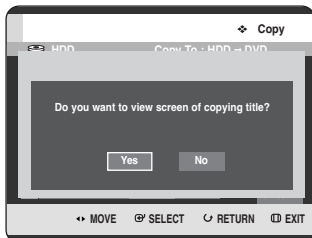
### - About Using COPY button -

Press the **▲▼** buttons to select title you want to copy from the title list and then press the **COPY** button on the remote control. You can go to the copy screen.

- During the Playback, you can also copy the title by pressing the **COPY** button.

## - Copying a Title that has been edited once before -

- 9** The “Do you want to view screen of copying title?” message is displayed.



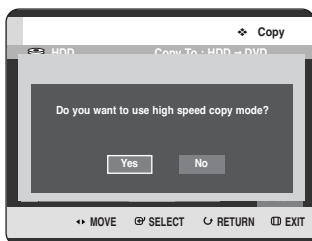
- 10** To copy a title while viewing the title on the copy screen, press the ◀▶ buttons to select **Yes**, then press the **ENTER** button.



- If **No** is selected, the title to be copied is not displayed on screen, and copying begins while the currently broadcasting program is displayed on the screen.
- To cancel the copying in progress, press the **CANCEL** button.

## - Copying an Unedited title -

- 9**<sup>-1</sup> The “Do you want to use high speed copy mode?” message is displayed.



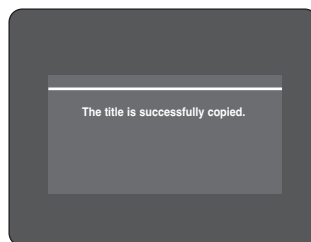
- **High speed copy** : This means that you can transfer without having to worry about the quality getting worse with each copy ‘generation’. It also means that copying can be carried out at the maximum speed possible.

- 10**<sup>-1</sup> To begin high speed copy, press the ◀▶ buttons to select **Yes**, then press the **ENTER** button. High speed copy begins. The title to be copied is not played back, while the currently broadcasting program is displayed on the screen.



- If **No** is selected, the title to be copied is displayed at its playback speed while copying.
- To cancel the copying in progress, press the **CANCEL** button.

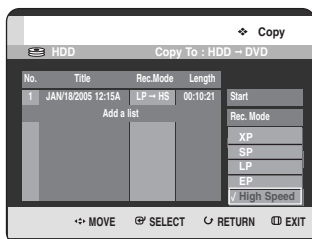
- 11**<sup>-1</sup> After a successful copy, “The title is successfully copied” message is displayed.



## Changing the Record Mode

To setup, follow steps 1 to 7 in page 107.

- 8** Press the **▶** and **▼** buttons to select **Rec. Mode**, then press the **ENTER** button.



- 9** Press the **▲▼** buttons to select record mode you want to record, then press the **ENTER** button.

- HS(High Speed) : Copies in the same record mode as HDD.
- XP/SP/LP/EP : You cannot copy the higher quality mode than original. If the same record mode is selected, the title is copied at high speed.



NOTE

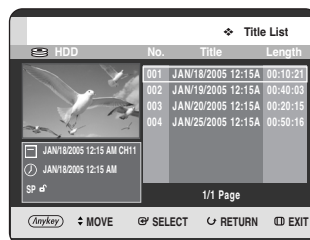
- Using the same method, you can copy a Playlist.
- High speed copying is not available for a title list that has been deleted partially.
- During copying, timer recording is not available.
- High speed copying is not available when:
  - Copying a title that can only be copied once
  - Copying a playlist
  - Copying a partially-deleted title
- Regarding title lists that can be copied only once:
  - Only available for DVD discs that support CPRM.
  - If a playlist contains a scene that can only be copied once, it cannot be copied.

## Copying Multiple Titles at One Time



Using the **TITLE LIST** button

- 1** Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray.
- 2** Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display. Check that the disc has enough available space for the recording.
- 3** Select the HDD by pressing the **HDD** button on the front panel of the HDD & DVD RECORDER or on the remote control.
- 4** With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.



Using the **MENU** button.

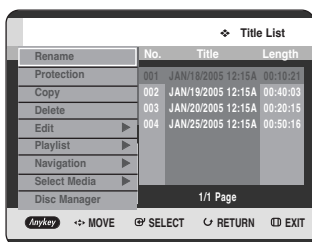
- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.

- 5** Press the **▲▼** buttons to select one of the title you want to copy.  
To move to other pages, press the **SKIP** (◀ ▶) buttons.

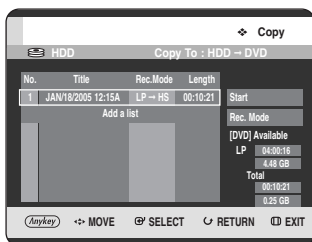
**SKIP**(◀) : previous page of title list

**SKIP**(▶) : next page of title list

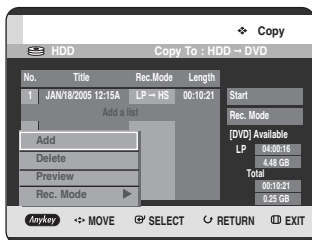
## 6 Press the **ANYKEY** button.



## 7 Press the **▲▼** buttons to select **Copy**, then press the **ENTER** or **▶** button. The Copy screen is displayed.



## 8 Press the **ANYKEY** button.



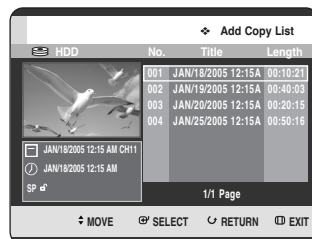
## 9 Press the **▲▼** buttons to select **Add**, then press the **ENTER** button.

The Add Copy List screen is displayed.

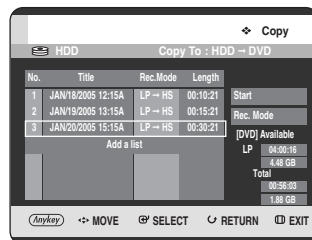
Press the **▲▼** buttons to select you want to copy, then press the **ENTER** button.

Other method: Press the **▲▼** buttons to select **Add a list**, then press the **ENTER** button.

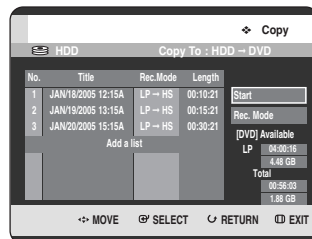
Press the **▲▼** buttons to select you want to copy, then press the **ENTER** button.



## 10 Repeat steps 8~9 to select a title you want to copy.



## 11 Press the **ENTER** or **▶** buttons to select **Start**, then press the **ENTER** button.



The added title lists into the copy list are copied.

To cancel the copying in progress, press the **CANCEL** button.

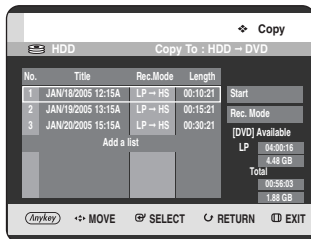


- If copy list contains at least one title that cannot be copied at high speed, it performs the step 9 described on page 108. Otherwise, it performs the step 9-1 described on page 108.

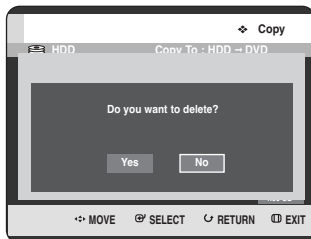
## Deleting an Undesired Title from the Copy List

To setup, follow steps 1 to 7 in pages 109~110.

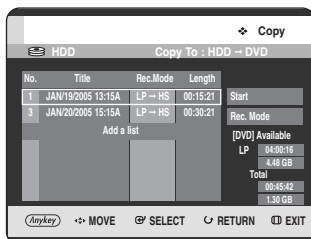
- 8** Press the **▲▼** buttons to select a title you want to delete from the copy screen.



- 9** Press the **ANYKEY** button. Press the **▲▼** buttons to select **Delete**, then press the **ENTER** or **▶** button. The message “Do you want to delete?” is displayed.



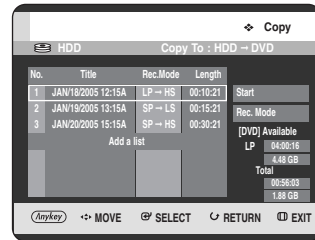
- 10** Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The selected title is deleted.



## Previewing a Selected Title from the Copy List

To setup, follow steps 1 to 7 in pages 109~110.

- 8** Press the **▲▼** buttons to select a title you want to preview in the copy screen.



- 9** Press the **ANYKEY** button. Press the **▲▼** buttons to select **Preview**, then press the **ENTER** or **▶** button. You can preview the selected title through the display window located at the center of the screen.



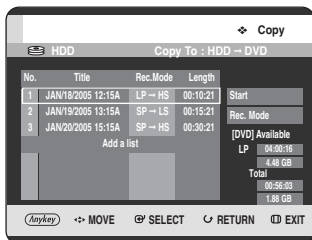
- 10** Press the **RETURN** button to exit the Preview mode.

## Selecting Record Mode of Each Title from the Copy List.

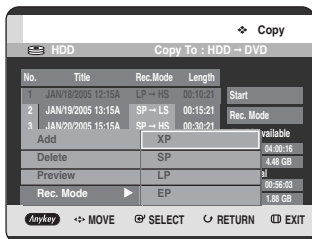
You can copy multiple titles while setting different record modes for each title.

To setup, follow steps 1 to 7 in pages 109~110.

- 8** Press the **▲▼** buttons to select a title to change its record mode in the copy screen.



- 9** Press the **ANYKEY** button. Press the **▲▼** buttons to select **Rec. Mode**, then press the **ENTER** or **▶** button.



- 10** Press the **▲▼** buttons to select the record mode you want, then press the **ENTER** or **▶** button.

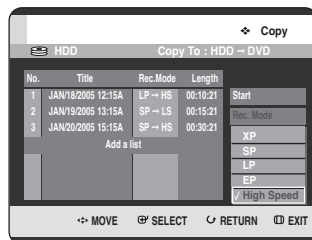
- 11** Repeat steps 9~11 to select a title to change its record mode.  
Rest of the copying process can be performed as described in page 107 to 108.

## Changing Record Mode of All Titles from the Copy List

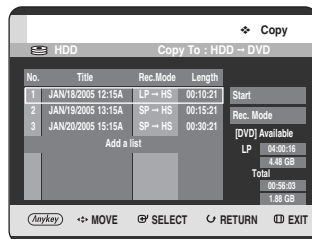
You can copy multiple titles while setting the same record mode for all titles.

To setup, follow steps 1 to 7 in pages 109~110.

- 8** Select the **Rec. Mode** on the right-hand side on the screen using the **▲▼◀▶** buttons, then press the **ENTER** button.



- 9** Press the **▲▼** buttons to select the record mode you want, then press the **ENTER** button.  
Rest of the copying process can be performed as described in page 107 to 108.



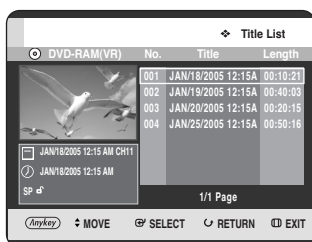


# Copying from DVD to HDD



## Using the TITLE LIST button

- 1 Press the **OPEN/CLOSE** button and place a recordable disc on the disc tray.
- 2 Press the **OPEN/CLOSE** button to close the disc tray.
- 3 With the unit in Stop mode/Playback mode, press the **TITLE LIST** button.  
The Title List screen is displayed.

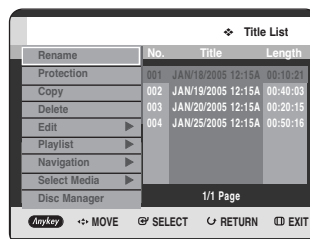


### Using the MENU button.

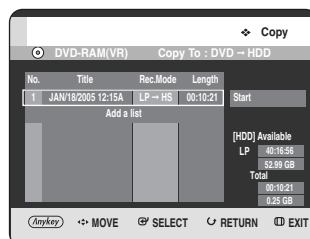
- With the unit in Stop mode/Playback mode, press the **MENU** button.
- Press the **▲▼** buttons to select **Title**, then press the **ENTER** or **▶** button.  
The Title List screen is displayed.

- 4 Press the **▲▼** buttons to select the title you want to copy.  
To move to other pages, press the **SKIP** (**◀▶**) buttons.  
**SKIP**(**◀**) : previous page of title list  
**SKIP**(**▶**) : next page of title list

- 5 Press the **ANYKEY** button.



- 6 Press the **▲▼** buttons to select **Copy**, then press the **ENTER** or **▶** button.  
The Copy screen is displayed.



### - About Using COPY button -

Press the **▲▼** buttons to select title you want to copy from the title list and then press the **COPY** button on the remote control. You can go to the copy screen.

- During the Playback, you can also copy the title by pressing the **COPY** button.

- 7 Press the **ENTER** or **▶** buttons to select **Start**, then press the **ENTER** button.



- 8** After a successful copy, "The title is successfully copied." message is displayed.



- Copying Multiple Titles at One Time – Same as an HDD operation(See page 109)
- Deleting an Undesired Title from the Copy List – Same as an HDD operation(See page 111)
- Previewing a Selected Title from the Copy List – Same as an HDD operation(See page 111)



NOTE

- You cannot copy anything else on finalized DVD-R and DVD-RW(V mode) mode.
- You cannot copy a DVD-VIDEO to HDD.
- Only video will be copied from title lists or playlist that contains still images.
- High speed copying from a DVD-RAM or DVD-RW (VR mode) is available.
- When you copy from DVD-RW(V mode)/-R disc to HDD, high speed copy is not available.
- Record mode cannot be changed when you copy a title from DVD to HDD.

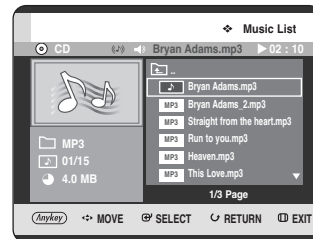
#### Contents Copy Specifications

Contents	DVD → HDD
Recorded Video Title	Supported
Copy Protected Title	Not supported
Copy Once Title	Not supported

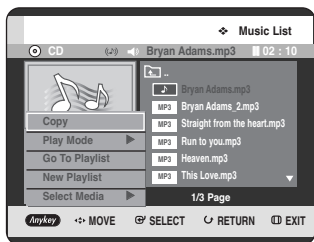
## Copying MP3 or JPEG Files from a Disc to HDD

### File Copy

- 1** Insert a JPEG disc or MP3 disc into the disc tray.
- 2** Press the **OPEN/CLOSE** button to close the disc tray. Wait until **LOAD** disappears from the front panel display. Check that the disc has enough available space for the recording.
- 3** Press the **▲▼** buttons to select **Music** or **Photo**, then press the **ENTER** or **▶** button. The MP3 or JPEG file list is displayed.



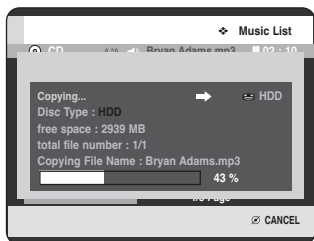
- 4 Press the ▲▼ buttons to select the MP3 or JPEG files you want to copy, then press the **ANYKEY** button.



- 5 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ► button.

File copy begins.

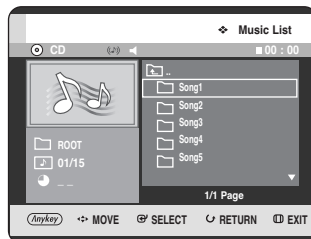
The copying of only 1 file cannot be cancelled.  
When copying only 1 file from a disc to HDD, it is located under the HDD's Music or Photo folder.



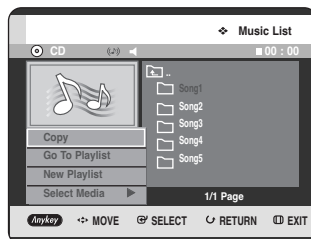
## Folder Copy

- 1 Insert a Disc (JPEG or MP3) in to the tray.

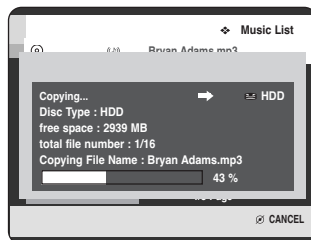
- 2 Press the ▲▼ buttons to select **Music** or **Photo**, then press the **ENTER** or ► button.  
The MP3 or JPEG folder is displayed.



- 3 Press the ▲▼ buttons to select the MP3 or JPEG folder you want to copy, then press the **ANYKEY** button.



- 4 Press the ▲▼ buttons to select **Copy**, then press the **ENTER** or ► button.  
Folder copy begins.  
Subfolders and files in the selected folder are copied.





NOTE

- Pressing the **CANCEL** button during folder copying will cancel the folder copying after the current file is copied.
- Up to 1,500 files and 1,000 subfolders can be copied into one folder for MP3 files.
- Up to 4,500 files and 1,000 subfolders can be copied into one folder for JPEG files.
- Files having an existing name of **\*\*\*.mp3/\*\*\*.jpg**, is automatically renamed to **\*\*\*01.mp3/\*\*\*01.jpg** and copied.
- It allows up to 999 copies to have the same name.
- You cannot copy an Audio CD.
- MP3 or JPEG files can be copied only from a disc to the HDD.
- The sizes of a file in a disc and the copied one in the HDD may be slightly different due to the file system.

#### Contents Copy Specifications

Contents	HDD → DVD	DVD → HDD
MP3	Not supported	supported
JPEG(photo)	Not supported	supported

## Disc Manager

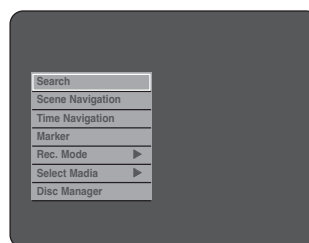


### Editing the Disc Name

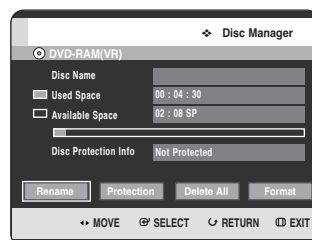
Follow these instructions to give a name to a disc.



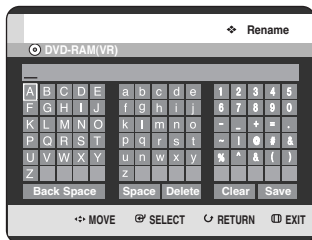
- 1 With the unit in Stop mode, press the **ANYKEY** button.



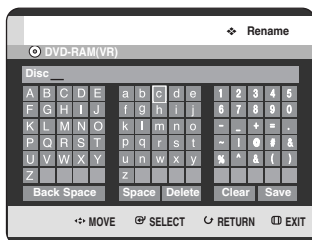
- 2 Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



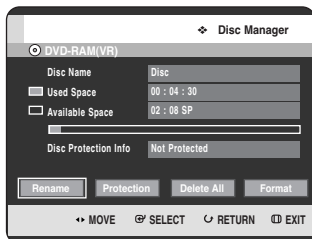
- 3** Press the ◀▶ buttons to select **Rename**, then press the **ENTER** button.  
The Rename screen is displayed.



- 4** Select the desired characters using the ▲▼◀▶ buttons, then press the **ENTER** button.



- 5** Press the ▲▼◀▶ buttons to select **Save**, then press the **ENTER** button.  
A disc name is given to the disc.



NOTE

- You may need to clear disc protect before beginning editing.
- Depending on the kind of disc, the displayed screen may be different.

## Disc Protection

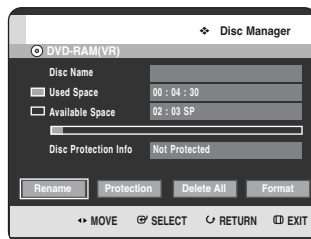
Disc Protection allows you to protect your discs from being formatted or deleted due to unintended operations.



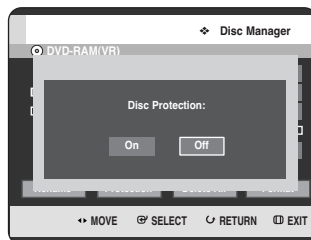
- 1** With the unit in Stop mode, press the **ANYKEY** button.



- 2** Press the ▲▼ buttons to select **Disc Manager**, then press the **ENTER** or ▶ button.



- 3** Press the ◀▶ buttons to select **Protection**, then press the **ENTER** button.



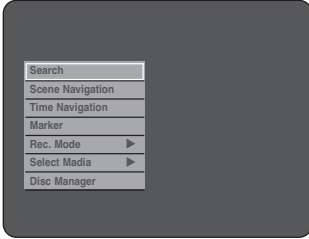
- 4** Press the ◀▶ buttons to select **On**, then press the **ENTER** button.

## 1 Formatting a Disc

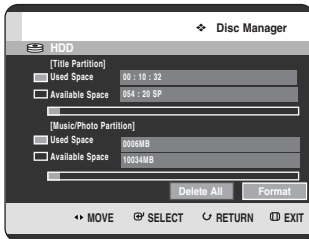
Use these instructions to format a disc.  
The disc protect should also be cleared.



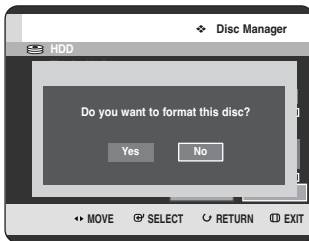
- With the unit in Stop mode, press the **ANYKEY** button.



- Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



- Press the **◀▶** buttons to select **Format**, then press the **ENTER** button.

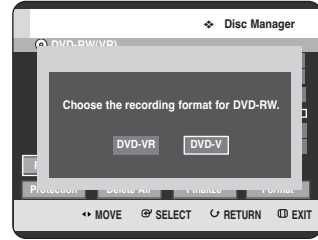


### HDD/DVD-RAM

- You will be prompted with the confirmation message “Do you want to format this disc?”.
- If you select **Yes**, you will be prompted with the confirmation message “All data will be deleted. Do you want to continue?”.

### DVD-RW

- You will be prompted with the confirmation message “Choose the recording format for DVD- RW.”



- Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The disc is formatted.

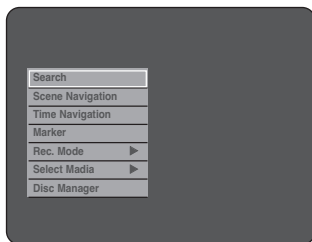
**DVD-VR and DVD-V are defined according to their recording format.**

	DVD-VR	DVD-V
DISC	DVD-RAM DVD-RW	DVD-RW DVD-R

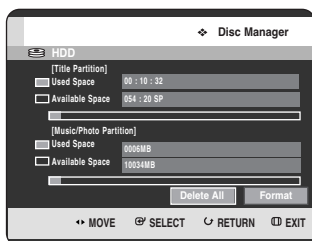
## Delete All Title Lists/Music Lists/Photo Lists



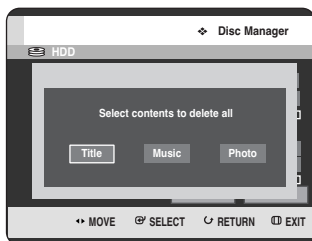
- 1 With the unit in Stop mode, press the **ANYKEY** button.



- 2 Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



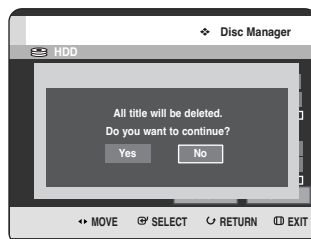
- 3 Press the **◀▶** buttons to select **Delete All**, then press the **ENTER** button.



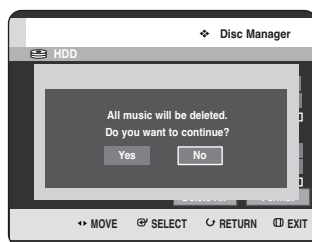
- When Protected Entry exists: The Delete All Title List function will not operate. If there is a title containing a still picture, however, that function will not operate. If you want to delete a protected entry, disable Protect for it on the Lock item.

- 4 Press the **◀▶** buttons to select the **Title**, **Music** or **Photo**, then press the **ENTER** button.

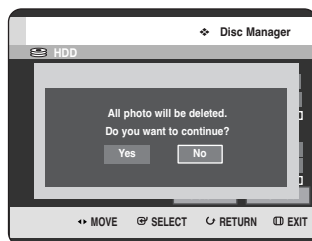
Title



Music



Photo

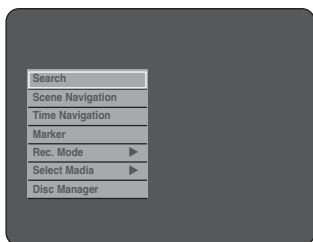


- 5 Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button.  
All title lists, music list or photo lists are deleted.

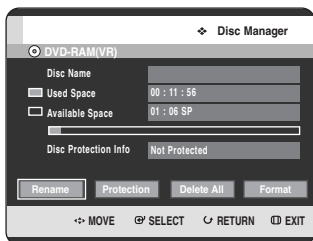
## Delete All Title Lists



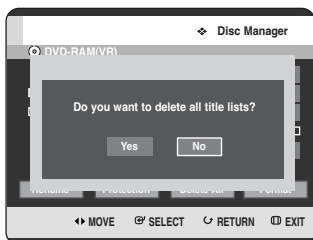
- 1 With the unit in Stop mode, press the **ANYKEY** button.



- 2 Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



- 3 Press the **◀▶** buttons to select **Delete All**, then press the **ENTER** button.
  - You will be prompted with the confirmation message "Do you want to delete all title lists?".



- When Protected Entry exists: The Delete All Title List function will not operate. If there is a title containing a still picture, however, that function will not operate. If you want to delete a protected entry, disable Protect for it on the Lock item.
- When protected a DVD-RAM is used, data cannot be deleted from a disc.

- 4 Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button.  
All title lists are deleted.

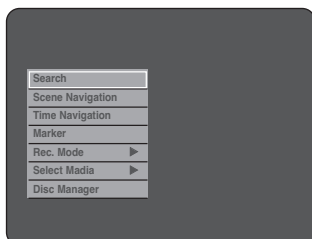


## Finalizing a Disc

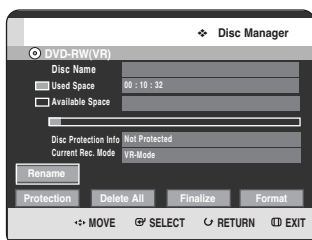
After you record titles onto a DVD-RW/DVD-R disc with your HDD & DVD RECORDER, it needs to be finalized before it can be played back on external devices.



- 1 With the unit in Stop mode, press the **ANYKEY** button.



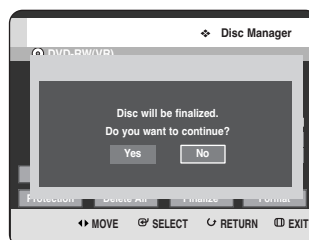
- 2 Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



- 3 Press the **▲▼** buttons to select **Finalize**, then press the **ENTER** button. You will be prompted with the message "Do you want to finalize disc?".



If you select **Yes**, you will be prompted again with the message "Disc will be finalized. Do you want to continue?".



- 4 Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The disc is finalized.



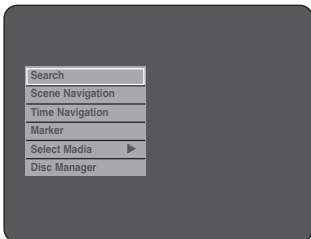
NOTE

- Once a disc is finalized, you cannot delete entries from the record list.
- After being finalized, the DVD-R/DVD-RW(video mode) operates in the same manner as a DVD-Video.
- Depending on the disc type, the displayed screen may be different.
- Finalizing time may be different depending on the amount of data recorded on the disc.
- Data on the disc will be damaged if the recorder is powered off during finalize process.
- When the disc contains a music or JPEG files, you cannot finalise the disc.

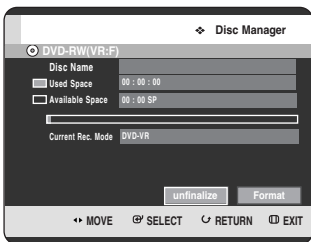
# Unfinalizing a Disc (V/VR mode)



- With the unit in Stop mode, press the **ANYKEY** button.



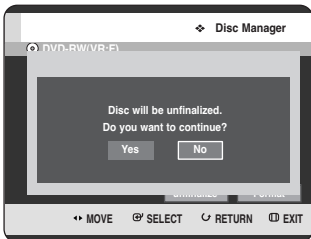
- Press the **▲▼** buttons to select **Disc Manager**, then press the **ENTER** or **▶** button.



- Press the **◀▶** buttons to select **Unfinalize**, then press the **ENTER** button. You will be prompted with the message "Do you want to unfinalize disc?".



If you select **Yes**, you will be prompted again with the message "Disc will be unfinalized. Do you want to continue?".



- Press the **◀▶** buttons to select **Yes**, then press the **ENTER** button. The disc is unfinalized.



- A DVD-RW can be finalized or unfinalized in Video mode.

	Finalize	Unfinalize
Mark	DVD-Video(RW)	DVD-RW(V)
Operation	Same as DVD-Video	Additional recording, protection and deletion are possible.

- A DVD-RW can be finalized or unfinalized in VR mode.

	Finalize	Unfinalize
Mark	DVD-RW(VR:F)	DVD-RW(VR)
Operation	Additional recording, deletion, editing, and protection are impossible.	Additional recording, deletion, editing, and protection are possible.

# Reference

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Specifications .....	127

## Troubleshooting

If your product malfunctions, go through the checkpoints below before contacting a Samsung authorized service center.

### Power

The input is displayed for a while when the power is turned on.



#### Checkpoint 1

The HDD & DVD RECORDER requires some time to initialize and the input will be displayed for approx. 10 seconds after it is turned on.

### Recording

Cannot record TV programs.



#### Checkpoint 1

Check whether the power cord is securely plugged into the power outlet.

#### Checkpoint 2

Did you set the HDD & DVD RECORDER channel settings correctly?

#### Checkpoint 3

Check the free space on your HDD/DVD-RAM/-RW/-R discs.

I pressed the **REC** button but there is no response.



#### Checkpoint 1

Recording is possible for HDD/DVD-RAM/DVD-RW/-R discs only. If a program is copy protected, it cannot be recorded.

## Playback

Cannot play the disc.



**Checkpoint 1**

Check whether the disc is inserted correctly with the label facing up.

**Checkpoint 2**

Check the regional code of the DVD disc.

**Checkpoint 3**

This HDD & DVD RECORDER cannot play some types of discs.  
(See pages 6, 45)

⊘ icon appears on the screen.



**Checkpoint 1**

You cannot use this operation or function due to one of the following reasons:

- (1) Your DVD disc restricts it.
- (2) Your DVD disc does not support this feature (for example: angles)
- (3) The feature is not available at the moment.
- (4) You've requested a title, chapter, or scan time that is out of range.

Play mode settings are different from the settings configured in the Settings menu.



**Checkpoint 1**

The disc does not support all selected functions. In this case, some settings configured in the settings menu may not work properly.

Cannot change the aspect ratio.



**Checkpoint 1**

The aspect ratio is fixed for DVD discs. (See page 40)

The angle operation does not work while playing a DVD disc.



**Checkpoint 1**

The angle operation is available only when the disc contains images captured from different angles.

The selected audio and/or subtitle language is not played.



**Checkpoint 1**

Audio and subtitle languages are disc-specific. Only the sound and subtitle languages contained on the DVD disc are available and displayed in the disc menu.

Cannot copy title or file to the other mode.



**Checkpoint 1**

DVD discs encoded with copy protection can not be copied to HDD.

**Checkpoint 2**

Refer to "Contents Copy Specifications" on page 6 to check if copying is supported.

## Video

The disc revolves, but no image or bad quality images are displayed.



- Checkpoint 1** Be sure that the Video Setting is properly set. (See pages 40~42)
- Checkpoint 2** Check whether there is damage to or any foreign material on your disc.
- Checkpoint 3** Some low quality discs may not play properly.
- Checkpoint 4** If scenes change from dark to bright suddenly, the screen may shake vertically temporarily, but this is not a fault.

## Sound

No sound.



- Checkpoint 1** Are you watching a program in slow or skip mode?  
If you are playing a program at a speed other than normal speed, sound will not be heard.
- Checkpoint 2** Check the connections and settings. (See pages 23~24, 38)
- Checkpoint 3** Check whether the disc is damaged. Clean the disc, if necessary.
- Checkpoint 4** Check whether the disc is inserted correctly with the label facing up.

No audio output.



- Checkpoint 1** Check whether you have selected the correct digital output options in the Audio Output Options menu. (See page 38)

## Timer Recording

Timer lamp flickers.



- Checkpoint 1** Check there is enough space in the disc for recording.
- Checkpoint 2** Check whether the current disc is recordable or not.  
Make sure to check before the start time of recording.

Timer recording does not work properly.



- Checkpoint 1** Re-check the recording time and the end time settings again.
- Checkpoint 2** Recording will be cancelled if the power is interrupted due to a power failure or another similar reason while recording.

## Remote Control Unit

The remote control doesn't work.



- Checkpoint 1** Point the remote control at the remote control sensor on your HDD & DVD RECORDER. Allow for proper distance. Remove obstacles between your HDD & DVD RECORDER and the remote control.
- Checkpoint 2** Check whether the batteries are empty.
- Checkpoint 3** Check for the **TV/DVD** selection button.
- Checkpoint 4** Check whether TV control button is selected or not.

Other problems.



- Checkpoint 1** Read the table of contents and then find and read the section describing your problem, follow the instructions given.
- Checkpoint 2** Plug your HDD & DVD RECORDER off and on.
- Checkpoint 3** If the problem still persists, contact a nearby Samsung service center.

## Other

I forgot my password for parental supervision.



- Checkpoint 1** Press and hold the **PLAY** (⏮) and **STOP** (⏹) button on the front panel of the Recorder for more than 5 seconds with no disc in the unit. All settings including the password will revert to the factory settings. Do not use this unless absolutely necessary. (Note that this function is possible only when no disc is inserted.)

Is it possible to change a subtitle and an audio signal on a recorded disc?



- Checkpoint 1** A recorded disc is played with only the subtitle and the audio signal which were selected during recording.

# Specifications



General	Power requirements	120V AC, 60Hz
	Power consumption	44 Watts
	Weight	9.27 lb (4.20 kg)
	Dimensions	17in (43 cm) (W) x 10in (25.5 cm) (D) x 3.1in (7.9 cm) (H)
	Operating temp.	+41°F to +95°F
	Other conditions	Keep level when operating. Less than 75% operating humidity
Input	Video (1,2)	1.0 V p-p at 75Ω load, sync negative
		S-Video input (Y: 1.0Vp-p, C: 0.286Vp-p at 75Ω load)
	Audio(1,2)	Max.Audio Input Level : 2Vrms
	DV Input	IEEE 1394(4p) compatible jack
	Receivable Channels	Regular TV broadcasting: VHF (2~13), UHF (14~69) Cable TV broadcasting: 1~125
Output	Audio	Analog output jacks 1, 2
		Optical/Coaxial digital audio output
		Full scale Analog output level : 2Vrms
	Video	Video output jack 1
		S-Video output 1 (Y:1.0Vp-p, C:0.286Vp-p at 75Ω load)
		Component output 1 (Y: 1.0Vp-p, Pb: 0.70Vp-p, Pr: 0.70Vp-p at 75Ω load)
Recording	Picture Compression format	MPEG-II
	Audio Compression format	Dolby Digital 2ch/256Kbps
	Recording Quality	XP (about 8.5 Mbps), SP (about 4.5 Mbps), LP (about 2 Mbps), EP (about 1.6 Mbps or about 1.2 Mbps),
	Audio Frequency Response	20 Hz ~ 20 kHz

## Audio Output

For DVD discs, audio signals recorded at 96kHz sampling frequency are converted into and output at 48kHz.

Disc Type	DVD	VCD	AUDIO CD(CD-DA)
Analog Audio Output	48 / 96kHz	44.1kHz	44.1kHz
Digital Audio Output	48kHz	44.1kHz	44.1kHz

## LIMITED WARRANTY TO ORIGINAL PURCHASER

Samsung Electronics Canada Inc.(SECA), warrants that this product is free from defective material and workmanship.

SECA further warrants that if this product falls to operate properly within the specified warranty period and the failure is due to improper workmanship or defective materials, SECA will repair or replace the product at its option.

All warranty repairs must be performed by a SECA Authorized Service Center. (The name and address of the location nearest you can be obtained by calling toll free: 1- 800- SAMSUNG)

LABOR	PARTS
One year (Carry- in)	One year

On carry-in models, transportation to and from the service center is the customer's responsibility.

The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase. It must be presented to the authorized service center at the time service is requested.

### EXCLUSIONS (WHAT IS NOT COVERED)

This warranty does not cover damage due to accident, fire, flood and/ or other acts of God; misuse, incorrect line voltage, improper installation, improper or unauthorized repairs, commercial use or damage that occurs in shipping. Exterior and interior finish, lamps, glass are not covered under this warranty. Customer adjustments which are explained in the instruction manual are not covered under the terms of this warranty. This warranty will automatically be voided for any unit found with a missing or altered serial number. This warranty is valid only on products purchased and used in Canada.

**HEADQUARTERS**  
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